



STORIES AND SKETCHES

Relating to Yorkshire.

BY JOHN TOMLINSON,

AUTHOR OF "SOME INTERESTING YORKSHIRE
SCENES," &c.

LONDON :
SIMPKIN, MARSHALL, & Co.;
DONCASTER: R. HARTLEY.

20457

HARTLEY AND SON,
PRINTERS BY STEAM POWER, DONCASTER.



JA670
y6T6

CONTENTS.

TICKHILL.	PAGE.
Chap. I.—Which is meant to be Historical and Topographical.....	1
II.—Describes a journey to Tickhill, undertaken by Roger Fitzhenry, giving a particular account of the Adventures he met with by the way	13
III.—In which the journey of Roger Fitzhenry is continued	22
IV.—Discloses Roger Fitzhenry's object in visiting Tickhill.....	28
V.—Gives a capital result to the journey.....	35
COLONEL RAINSBOROUGH'S FATAL SURPRISE AT DONCASTER.....	42
CALVERLEY HALL.....	52
THE HERMIT OF LINDHOLME.	
Chap. I.—Is merely an Introduction	74
II.—Brings the Hermit to view, and discloses some particulars respecting his manner of life	79
III.—In which the Hermit discloses his Private History	84
IV.—Shews what came of the Hermit's Contract, and how Master Greaves saved himself by Flight	90
ON THE GRADUAL EXTINCTION OF VERMIN.	
Sparrows, Polecats, &c.	96
Badgers	102
Foxes	108
THE IRON SINEWS OF YORKSHIRE.	
A few General Remarks	113
Smelting the Ore	119
Puddling and Rolling	125
Masbrough Old Iron Works	132
The Manufacture of Steel	138
Iron Branches in and around Rotherham	146

IV.

	PAGE.
The Metropolis of Steel.....	160
Atlas Works.....	166
Cyclops Works.....	177
Steel Bells.....	183
Yorkshire Engine Company.....	191
Doncaster Railway Plant	211
THE OAKS COLLIERY TWO MONTHS AFTER AN EXPLOSION	223
NICHOLAS YAK, AND HIS DAUGHTER.	
Chap. I.—The Old Doncaster Manors	237
II.—The Gipsies' Camp	239
III.—A Guest to Supper	242
IV.—A Young Damsel, and Mischief	248
V.—The Mystery	255
VI.—Extraordinary Coincidents	261
VII.—A Gleam of Light; but very little Com- fort	267
VIII.—Discovered at Last	274
IX.—All is Well.....	281
TRADES UNIONS AT SHEFFIELD.....	287

STORIES AND SKETCHES RELATING TO YORKSHIRE.

TICKHILL.

CHAPTER I.—WHICH IS MEANT TO BE HISTORICAL AND TOPOGRAPHICAL.

In my rambles through various Yorkshire towns and villages, I have felt surprised, even appalled, at the relative changes which a few centuries bring to pass. Then again, after a few moments' reflection, the enquiry would arise—Why feel surprised at all this? Is not constant change the very law of existence? I look at the physical history of this great globe, and find repose and luxuriance alternating with convulsions and re-organization; a primitive state of things nowhere. There is also a natural life of states; infancy, maturity, and decay. If it be true, what the old adage says, that Nature abhors a vacuum, it is equally evident that our social instincts abhor uniformity, for uniformity must soon degenerate into stagnation, and there would disease fester. Can we live well always on one article of diet? No. Neither can our moral and social life thrive well upon conventional husks. There may be, and doubtless is, a preordained law of development; so that even great evils contain within themselves the germs of their own destruction, proving to all who will understand, that virtue is the supreme good—virtue in its multiform phases, but universal application. But, halt! roving mind; this is no place to garner materials of philosophy: come back again to Tickhill. Well, this place was once of greater consequence than our largest modern Yorkshire towns; of greater importance than Sheffield, Rotherham, Barnsley, Huddersfield, Halifax, Leeds, or Bradford.

After the Conquest Tickhill, and many rich manors besides, fell to Roger de Busli ; closely adjoining were part of the territories granted to Wm. de Warren : each baron must have somewhere to live, so the Busli choose Tickhill, the Warren selected Conisborough, and, friends or foes, they began to vie with each other in the arts of castle building. Whether or not there was a Saxon fortress at the former place cannot now be determined, but both tradition and history assign a military station to Conisborough long before the Norman William came. If Hengist fought and died here (you may see a mound near the Castle-hill under which, people say, the great warrior lies buried), then is it highly probable that even the ancient Briton had fortifications at Coer Conan, after their mannner. Was not King Egbert here roused from his Whitsuntide revelry by news that the Danes had landed, and were sacking his towns of Englelond which lay nearest to the sea ? Had not the famous Harold a castle-mansion here ? If any one disputes this let him read the veritable history of Idleboe, and doubt no more. Yes, reader, the antiquity of Conisborough is stupendous.

We cannot say, in certainty, that there was any Saxon fortress at Tickhill. Some writers have conjectured that because the Castle-mound is an earth-work, similar to that at Conisborough, that both are contemporaneous artificial constructions ; therefore, say these guessers, the two castles must have been erected on antient Saxon or British mounds. I used to think the same, but a closer comparison of these structures with other castles in Yorkshire of strictly Norman origin, convinces me that this opinion is altogether fanciful. A Saxon strong-hold there doubtless was at Conisborough, and elsewhere ; but the high minded Norman barons brought no pettifogging architects content with assimilating their plans to the rude barbarian's remains. Everything would be contemptuously swept away, and adequate sites prepared for the immense fortifications. Immense they truly were, for this Castle-moat of Tickhill enclosed something like seven acres of ground : furthermore, the walls were very strong. Here, where the surrounding neighbourhood is low and level, it would be necessary to construct an artificial

mound : but in the case of Conisborough the situation is very different, for there commanding hills and cliffs encompass on all sides the narrow valley out of which the Castle peers. But cannot we see at a glance that a great proportion of this mound would be thrown up out of the *fosse* ; while to build a castle on a rocky eminence might, in case of seige, necessitate the garrison to surrender for a drop of water. The architects knew, well enough, what they were doing.

We are apt to look upon olden time as an age of idleness, where, because men had few artificial wants (and our real wants are small), every one had plenty of leisure, since he was never perplexed how to live. This might be so during the Tudor dynasty, but it did not happen, I suspect, under the early Norman yoke. Then the labourers were few, and there was work to be done ; not the simple work of two or three *ploughlands* in a manor (which was all that need be tilled), or supplying a few rude articles of handicraft ; but the labour of castle building—an art almost unknown to that rude undisciplined people. During the first century after the Norman Conquest, the whole country seemed bristling with castles : so that we may conclude that the people had a busy time of it. When we think about the building of these fortresses, so mighty and so numerous, at a period when the entire population of this country did not amount to half the number of souls now living in London,* the results are almost astounding. It would seem as if nearly the whole *villein* race was employed upon castle building, under the direction of Norman architects, the meanest labourers carrying material like beasts of burden, the skilled men rearing the walls. Possibly, terror of summary punishment would expedite matters to a large

* We have to struggle through much obscurity in collating those early census. Domesday-book supplies us with the most authentic information ; but even from this source we can gather only an approximate return of the gross population. It would appear that at the Conquest there were not above a million and a half of people in England ; but supposing in consideration of the foreign influx, under William and King Rufus, we take it at two millions ; the country would be but thinly inhabited. The whole population of Yorkshire, at this time, including chief proprietors, ecclesiastics, free-tenants, burgesses, and villeins would not exceed ten thousand.

extent, working as the men did under the surveillance of military overlookers. In piling these famous castles, strength was the prime consideration—they must be made impregnable. And they were made strong, so strong that there was scarcely any way of storming them, providing the walls and gates were kept vigilantly guarded. To break through the barbican by any mechanical appliances that age possessed seems impossible. The most feasible plan was undermining; not so easy to accomplish when the miners were exposed to showers of arrows and other missiles thrown from the castle. But if the leaguers managed to destroy the barbican, or cross the moat, still there was the principal gate of triple strength and flanked with enormous towers, while an iron trellis or portcullis was let down from above to protect the entrance. The castle wall was at least ten feet thick, and above twenty feet high, the foundations going deep down into the water of the fosse. How is an army, be it ever so numerous, to storm this wall? By scaling it? The wall is strengthened and protected by towers, where the archers are concealed, taking aim through the narrow loop holes; while within the outer *ballium*, on the square roofs of detached buildings, the brave defenders of the fortress congregate, a sure protection against scalers. Suppose that by stratagem, under cloak of night, a few men do scale the outer wall, and drop down into the first *bayle*, the watch probably will find them out before they can open the gate to the besieging army and let down the draw-bridge. Granting that this happened, however, and the enemy is admitted *en masse*, there is still another high wall flanked with towers, protecting the inner bayle, in which is the massive keep. The same system has again to be resorted to, unless this wall can either be undermined or the inner gate forced; and even then there is the keep, which seemingly might hold out for a generation, providing it contained sufficient supplies. They knew what they were planning, those large-minded Norman architects.

It is said that William the First easily subjugated this country, because the people had so few places of defence. Still, I do not think that fear of foreign invasion was the primary motive for erecting all these

castles ; it was to consolidate baronial power. One would think that after having granted to him manors embracing half a county, the keen edge of a feudal lord's rapacity would be appeased. It was only whetted and thereby rendered sharper. These helpers of a conqueror had got possession easily by the sword, and now claimed the privilege of escheating everything valuable which their territories embraced : the neighbouring barons, moreover, often coveted each other's wives or daughters, and indulged in mutual robbery. The mesne lords kept their beautiful daughters secure within their own castles, rarely permitting the maidens to wander far without a military escort or sufficient protection. But serfs or native freemen experienced common loss in these richest household treasures, and had to stifle all outward display of burning wrongs. These castle-defended-robbers indulged without restraint their licentious passions until the very desire palled ; then ejected or cruelly murdered the objects of their lust. I sometimes think that what *we* term true affection could hardly subsist under such a state of things. Households might well be few, when the honest propagation of children was attended with such gloomy casualties.* Can anything really noble exist under a system of brigandage or free-bootery ? Novelists have painted such a state in glowing colours ; but it is only like enamelling a face from whence the tints of youthful beauty have all flown.

* One of our earliest historians does, indeed, tell a different tale. He asserts that in William the First's day a girl might walk throughout the length and breadth of the land with hoards of gold on her person, so rigorously was the law against plunder and violation administered. The whole condition of society at that age forbids us to indulge in such a favourable retrospection. Did not this immaculate William waste the whole district of Yorkshire, between the Tyne and the Humber, leaving not a hamlet and scarcely an individual—leaving nothing for the Danes to conquer ? This conduct shows a wanton and unparalleled disregard to life and property. Were not assaults and outrages so common in that day that William made the Hundreds responsible for the life of every Norman taken away by violence, imposing this fine in the hope of lessening the crime ? Mark, it was the life of a Norman, not of a Saxon freeman or villein, which was thus protected. There was a mutual system of recrimination going on between the natives and their oppressors ; private outrages and secret murders were exceedingly common, and there was no statute law adequately administered.

There is only a transient, hectic flush in the enjoyment of unrighteous pleasure ; for this soon kills the true life of man. You may think, reader, as many others have imagined, that much of the penalty which men involuntarily pay for the indulgence of unlicensed desire is the result of conventional theory or education, moving the soul, as it were, out of a perfect animal condition. Truly, if we may credit the old Saxon chronicles, those early barons did live like tangible wolves or other natural brute beasts ; but that all this tended to individual well-being or to national prosperity, we must emphatically deny.

But what do we know of the real events associated with Tickhill Castle ? Alas ! very little. We know who built it—one Roger de Busli ; and with some patience we might, probably, compile a list of its successive proprietors ; but of the social facts in the case—all that which it is most interesting and important to know, we can glean scarcely anything. Well, we must be content with such materials as there are. King Rufus, it appears, granted possession of the Castle and manor to Robert de Belesme, who was allied to the Busli, but not the direct heir or next of kin ;* and the right of possession was, on this account many years afterwards, the subject of fierce contentions. In the meantime Henry I. appropriated the Castle and Manor of Tickhill, retaining them until his death ; but some say that the King gave them in dower to his second wife. It was during Stephen's turbulent reign that the Earl of Eu (descended from Roger de Busli's sister) put forward his claims against all the Belesme line, and, in conjunction with William de Clairfait (called also Clearfoy, *alias* Purefoy), entered upon possession ; but in Henry the Second's reign it was again attached to the

* This Robert de Belesme was one of the most turbulent and oppressive barons that the age produced ; a prince among his Norman allies, but thoroughly hated by the English. He took up arms in favour of Robert, the King's brother, and was besieged by Henry I. at the Belesme Castle of Bridgnorth : then the barons, fearing the increasing prerogative of the Crown, and loath to destroy one who was the most powerful of their order, urged a treaty upon the King ; but Henry, impelled by the same spirit of revenge which actuated his English troops, continued the siege until the castle was taken.

Crown, and probably made the dower of a queen, since we find that Eleanor of Aquitaine, Henry's second wife, founded a chapel within the Castle walls. It is clear, therefore, that royalty often honoured Tickhill with a visit.

And now there came a visible change in the outward form and manners of the age. Those oppressive and licentious practices of the early barons began to work their own cure. Incredible monkish legends, once the chief and almost the only literature extant, gave place to thrilling "roundelays," where valour in man, beauty and chastity in woman, were the exciting themes. Thus Chivalry was born, and the spirit once awakened did not lack scope for development. Every high-born damsel, especially if she were fair and of virtuous repute, had champions in abundance to protect her person, or uphold her fame. Truth and honour were now acknowledged as necessary appendages to noble birth. Woman's smile or a simple love-token would incite the courage of youthful warriors, even to the killing of dragons, griffins, or any other foes, until, for want of sufficient local adventure, the Chivalry of England and France engaged to drive the Saracen out from the Holy Land. Richard the 1st, as we all know, went on that expedition; but previously he settled the honor of Tickhill upon Earl, or, as he would be now designated, Prince John, still retaining the Castle, thinking, no doubt, that such strongholds were not safe in the hands of his weak and treacherous brother: so Roger de Fitz-Eustace (subsequently of Pontefract) was made Governor of the Castle for the King. And yet he was exceedingly liberal to his brother, heaping earldoms and manors upon him, so that John had jurisdiction over nearly a quarter of England. Much would have more, however; and this man is a signal instance how ingratitude may keep pace with benefits received. Richard left the government of England under the joint regency of Hugh, Bishop of Durham, and Longchamp, Bishop of Ely. But the King had not long been absent before Prince John obtained possession of Tickhill Castle, and when this usurper's policy seemed more than usually treacherous, a strong gathering of Richard's loyal adherents was held at Doncaster. Hither came the Arch-

bishop of York, Hameline of Conisborough, Wm. Stuteville, with Hugh Bardolph, the King's justice. After an exciting conference, the Archbishop recommended an attack of Tickhill Castle, but some of the other nobles dissented, thinking, no doubt, it would be impolitic to make an enemy of one who, at no distant day, might have the royal power to depose them. Meantime matters went very badly with the regency, for Longchamp and Hugh de Pudsey did not draw together; they were jealous rivals, or inveterate enemies, each trying to crush the other, while John aimed as eagerly to supplant both. When Longchamp, in the insolence of power, took the government into his own hands, setting aside, and even imprisoning Hugh, Bishop of Durham, the King's brother joined a convention of the people to resist this despotic regent's sway—meaning, no doubt, to make a straight path for himself. John had plenty of ambition, but neither foresight nor courage sufficient for such an emergency. It is no wonder that private faction and insubordination worked mischief, when the King was so long absent from his dominions. Would it not be so even now? Still in England the name of Richard was a tower of strength; and now, after three years' absence, he was coming home, albeit with aspirations considerably damped, for that immense army of crusaders was dwindled to a wreck. We all know the result—how Richard was waylaid and imprisoned, what plotting there was, what conflicting reports grew rife, how John made an infamous treaty with the French king, and came back with a wilful lie in his mouth, saying he had certain intelligence of Richard Cœur de Lion's death, and claimed the crown as his brother's successor. The people did not believe him, however, and resisted all his attempts to get crowned. By-and-bye, trustworthy information arrived that King Richard had been brought before the diet at Worms, and might be ransomed for 150,000 marks (about £300,000), a large sum at that day. But he was popular with the English people; the very heart of the nation had been stirred by news of the King's captivity; and now the clergy, barons, knights, and burgesses vied with each other in raising the stipulated sum. The bishops and clergy gave a tenth, and in some cases even a fourth of

their annual income, while even the plate belonging to religious houses was melted down, so that a large proportion of the sum was immediately forthcoming, hostages being given for the remainder, whereupon Richard was set at liberty. The King of France then wrote to John that laconic epistle—"Take care of yourself, the devil is let loose." But a short time previous to this a large army of loyal Yorkshiremen was raised, the head-quarters of which was at Doncaster. The same Hugh de Pudsey led them on to the siege of Tickhill Castle; but Robert de la Mare defended it resolutely, defended it long, refusing to credit the news of Richard's being alive. He was at length obliged to surrender, when Roger de Laci executed fierce military law upon certain subordinates who had, as he affirmed, basely delivered up the Castle to Prince John, thus gaining for himself the appellation of Roger de Hell.*

After Richard the First's death, John found himself unable to rule and overawe his barons; then it was that those vengeful lords put forward their own private claims in a menacing tone. The King seemed utterly incom-

* This Roger Fitz-Eustace, constable of Chester, was distantly related to the Lacies through the maternal line, but, succeeding to the estates, he also took the name of Laci. He joined the crusaders along with his father, when the latter died abroad. Roger was at the siege of Acre, and also was sent as military ambassador to settle perturbed affairs in Wales: there he quieted the people by a method which Oliver Cromwell long afterwards pursued with Ireland, gaining for himself a similar local reputation. Hollingshead's *Chronicles* gives a pithy account concerning his resumption of duties at Tickhill Castle:—

"Roger de Lascie, constable of Chester, took Alane de Lec and Peter de Bouencourt, and upon despite hanged them, for that beinge in truste amonge others with the keepinge of the castells of Nottingham and Tikehill, which he had received unto his custodie of the Bishop of Elie, quondam Lord Chancellor, they had consented to the treason of Robert de Crokeston and Eudo de Danille, which delivered the same castells unto John, Earle of Montaigne. The same Earle of Montaigne was highly offended for the deathe of these two persons, and therefore wasted the lands of the saide Roger, which laic within the compasse of his jurisdiction."

In the year 1199, King John delivered over to Roger de Laci the Castle of Pontefract, the said Roger to pay one hundred marks annually for five years, and also to give unto the King yearly ten palfreys and ten lease of greyhounds, besides yielding up his eldest son as security for his loyalty to the crown.

petent either to deal with rival claims, or, like a strong ruler, to retain those powerful fortresses to the Crown. Retain Tickhill Castle John could not, and which of the two private litigants to favour, so as thereby to strengthen his own interests, seemed a matter of some perplexity. Robert de Vipont married the last female heir of Ernaldus, Roger de Busli's brother, while the Earl of Eu claimed from a sister of the said Roger de Busli. By the right of primogeniture (a strictly feudal institution), the question was plain enough; but estates and dignities did not universally follow the acknowledged rule; for was not there living then a son of Richard the First's, and John's eldest brother.* The King at length saw, or imagined, that it would be most politic to secure the Eu connection, and therefore by writ commanded the delivery of Tickhill Castle, with all rights, &c., to the House of Eu. Robert de Vipont contested this claim, and, probably by force, got possession of the Castle, holding it until Henry the Third's reign, when the question came to be long and tediously argued in the Exchequer Court; so that at length Alice of Eu was put into possession. This Alice went abroad; but soon, either by death or forfeiture, the Castle again reverted to the Crown; but, except a temporary bartering of it to John of Gaunt, and although it was frequently afterwards claimed by descendants of the Busli, the Crown never let it go again.

Wherever there was a Castle, we may naturally infer there would be a Church. But the present Church of Tickhill was not built until the reign of Richard II. This is evident from the various armorial decorations on the tower. Here are the arms of Castile and Leon, which were borne by John of Guant, and therefore place the date of erection not earlier than towards the close of the fourteenth century. Moreover, it appears that Richard Raynerson by his will, dated 1390, left one hundred shillings towards the building of Tickhill Church. Over the western entrance are four shields, displaying the arms of Fitzwilliam, Eastfield, Sandford, and White; all of which families were residing in or near

|| It is generally admitted that this youth was murdered by his uncle John.

Tickhill during the fourteenth century. The tower is further adorned with several human figures, principally female, in niches, but whom they are intended to represent I never could discover. The interior of the building contains many curiosities in the shape of altartombs, and monuments, several of which date from the commencement of the fifteenth century, while one, at least, is said to have been removed from some more ancient religious edifice. The principal of these are an altar-tomb and inscription to William Eastfield, steward to Queen Philippa, and a magnificent alabaster tomb, richly sculptured and painted. Upon this latter are recumbent figures of a knight and his lady, while around the upper edge of the tomb runs a crowded inscription, now almost illegible, but which, many years ago was copied, and reads thus :—

“Pray for the soul of Sir Richd. Fitzwilliam, Knt., and Elizh. his wife, daughter and heiress to Thomas Clarel, the which Sir Richard departed the 22nd day of Sept., A.D. 1478, and dame Elizh., the 12th day of May, A.D. 1496: and also Sir Thomas Fitzwilliam, and the Lady Lucy Nevell, daughter and one of the heirs to the Lord John Nevell, Marquis Montague, his wife; the which Sir Thomas deceased”

But there was an earlier church at Tickhill—a Saxon or early Norman church. We have evidence that it was called All-Hallows, and situate a little distance from the present town; but there our knowledge ends: not a relic of the building has occupied this site for many centuries.

We can gather only a few scanty materials concerning the religious houses of Tickhill. Leland mentions, “A house of freres a lytyl by west without Tikhil, where lay buried divers of the Fitzwilliams, as the grandfather and father to my Lord Privy Seal, the which be now translated to the Paroch Church of Tikhil. So ys Purefoy *alias* Clearfoy. There were also buried divers of Clarells in Tikhil Priory.” The monuments translated to the Parish Church might include that tomb, the inscription of which we have just read, it being probably removed here a short time before the dissolution of religious houses. The Clarells are said to have founded this Priory towards the close of Henry the Third’s reign, and it is sometimes designated Clarell Priory. But how are we to reconcile Leland’s account

that Purefoy *alias* Clearfoy was buried here, for this man was evidently the William de Clairfait who held the Castle under King Stephen? Either the foundation of this Priory was much earlier, or, what is more probable, that there was another religious house of some eminence in Tickhill.

Of Hospitals, there were no less than three, of which St. Leonard's is perhaps the earliest. The sad condition of brethren residing here was made the subject of a petition by Archbishop Gray in 1225. Many changes have transpired since then; and as I recently stood before the quaint old timber house, the quiet, comfortable appearance of the ancient rooms forbade me to infer that the condition of these modern inmates was very sad. Of the other two hospitals one was founded by John of Gaunt for four poor people, allowing 6d. per week for each; it is now supported from an endowment of 28 acres of land. The other institution appears to have been specially designed for priests, and was alienated at the dissolution of religious houses.

Upon the more modern aspects of Tickhill, it is not my purpose to dwell; and yet there is something of interest connected with these. During the fifteenth and sixteenth centuries, many wealthy merchants were born or resided here, two or three of whom became afterwards Lord Mayors of London. There is an old tradition of a Tickhill "Guild," where local merchants and traders congregated. There are also visions of clothiers bringing their manufactures on pack-horses through Tickhill to the "port of Bautree," and lead merchants from Derbyshire transporting their ore by the same route, as best they could. Many changes have taken place in trade and transit since that period. But even in that later age, Tickhill Castle had a very bad character, being, from all accounts, little better than a nest of brigands. It was a common practice for knots of armed men to sally forth and plunder those honest traders, hiding themselves and their booty within the Castle. But the end came at last: Oliver and his coadjutors first captured and then gave orders for utterly demolishing this fortress. The site is now occupied by a private residence still called Tickhill Castle.

CHAPTER II.—DESCRIBES A JOURNEY TO TICKHILL, UNDERTAKEN BY ROGER FITZHENRY, GIVING A PARTICULAR ACCOUNT OF THE ADVENTURES HE MET WITH BY THE WAY.

“ Roger ! Come, its time to get up. Roger ! [*giving him a vigorous poke with the elbow.*] Donna Maria ! Why he’s as fast as a tortoise. But I know what *will* rouse him.” Every man has a vulnerable part somewhere, and the sleeper is sensitive under the third rib [*nips him*].

Now, my pretty one, do not suppose that an old disciple of Lavater cannot read that phiz-hieroglyphic, which as Tiffany would say, is half a frown and three-quarters of a smile. But you are wrong, inferentially and absolutely wrong. You were cogitating as follows :—
SCENE.—*A green Damask bed, in a lofty, elegant chamber.* DRAMATIS PERSONÆ. *A Family Man, and a Family Man’s Spouse.*—The real facts are a subject more worthy the pencil of a Holbein or a Carracci. Picture to yourself a room in Nottingham Castle, not the present large and ugly ruin, but that Norman fortress built by William the Conqueror, and afterwards conferred upon his natural son, Wm. Peverel. It is very dimly lighted, with walls thick as a prison, and so bare of furniture that the keenest bum-bailiff would despair of making a seizure.

The first nip produced an effect, but not such as to awaken the sleeper : so he nipped him again.

“ M—m—m. Rats ! Sche—e—e ! [*rubbing his eyes.*] I see now : its all right, Brian.”

A huge bowl of water had previously been conveyed into this sleeping room, into which the aforesaid Roger ducked his head and arms, scrubbing himself afterwards with a towel of goat’s hair, which operation gave a healthful glow to the skin. And then he said his prayers ; very devoutly so far as the outward ceremonial appears, and let us hope, with some benefit also to the inward life.

"Now Brian, listen. I am going a long journey, as before advised, and thou hast done well to awaken me betimes. Saddle Ronald, my charger, and prepare a good horse for thyself ; for we must travel some thirty miles or more through the forest of Sherwood before this day's sun lies down below the clouds. Fill two flasks with the best wine, and put plenty of provision in our wallets, and look well to thine arms."

"Then I must rouse Hugo to help me."

"Right : but make no delay. [Exeunt Brian.] He's a faithful fellow—somewhat forward in his bearing, but as true as my Cologne blade."

After a hearty but very hasty breakfast, 'Squire Roger Fitzhenry buckles on his armour, and is speedily mounted ; the castle-guard has notice of their intended egress, the gates are opened, when, putting spurs to their horses' flanks our stalwart riders soon reach the base of the stately hill, clear of the little charred town of Nottingham. How pleasant it is to trot through the earliest beams of sunlight, where, from the dew-laden glades and woody pathways May's hungry Sol distils a thousand perfumes. They trotted on—these youthful horsemen—feeling the exhilaration although but faintly cognizant of the sources from whence delight sprung. Soon they began to descend among the shadows of dark woods, and through pathways very much impeded by brambles. And yet, while Zepher's breath scarce woke the trees, music there was in plenty. The dove, with amorous feelings ripe, was cooing to his mate ; and thousand songs of joy ascended high on that young English morn. The fox did bark to rouse his slumbering prey, and many a faithful hen died on her nest, rather than quit the charge. But what cared those rough riders about the symphony of birds, or the individual motives which directed brute beasts in their prowling ? Next to nothing : the ear took in certain outward sounds, but these scarcely vibrated to the inner sanctum.

I had almost forgotten to mention that our horsemen were accompanied by a hound ; one of those large, strong, wiry, primitive dogs which we now see only in pictures : he (the dog) took a visible interest in those voices of the forest. At times he would halt suddenly,

listening with head inclined ; comparing, reflecting, judging ; then, because his conclusions did not demand any decisive course of action, off started the hound to regain his companions. How do we know this identical dog's particular experience ? A reason is soon given. You are aware that the ancients believed in what is called metempsychosis. Well, the soul of a dear friend's ancient grandfather dwelt in that dog ; so the matter can be easily substantiated on the authority of this ghost.

After a while—say an hour from the time our travellers set forth—the road, if it could be called a road, became somewhat intricate, and Brian began to manifest anxiety.

“ I believe,” said he, “ that we are verging too much toward the sun.”

“ We are all right,” replied the 'Squire : and they went on a little further. But soon the faintest trace of a pathway was lost in what seemed an interminable jungle, and even 'Squire Roger began to acknowledge that they were wrong.

“ The dog sniff's something ; there is game of some kind in the wind.”

“ Deer, probably,” said the sagacious Brian.

Just then, a grisly old boar was disturbed, which grunted, and peeped out from his lair. Who are these, thought he, thus rashly daring to disturb my solitude ? The dog advanced first, as if to brave attack, then halted short, disliking much the sight of tusks so menacing. Then did the boar step out grinning most horribly ; but ere he reached the hound 'Squire Roger spurred his horse, quick to the rescue. He lifted up on high his dazzling axe, meaning, no doubt, to sever the pig's chine ; but the brute swerved, and thus received a foul cut in the hams. This so enraged the boar that he became like his progenitors possessed with devils. How madly he did rush ! resolved to gore the horse and rider—such deadly purpose gleamed in his small bright eye. The horsemen were resolved to thwart the wild boar's purpose : they killed the pig, and afterwards pursued their journey, troubling themselves no further with the carcass, except to let the hound refresh himself with blood.

But neither horse nor man can travel well all day without something to eat and drink. Moreover the weather was very hot : so when the riders came to a little dell, where appeared very sweet pasturage, they alighted from their saddles, pulled off the horses' bridles, tied a piece of cord to the neck and fore leg of each animal, so that they could not wander far, and thus permitted them to graze. The men spread their lunch upon the grass, and carelessly reclined under the boughs of a gigantic tree : they sat, or rested a long time over their wine. This liquor was poured out into little brazen cups, 'Squire Roger being first served with due honour ; and as they quaffed in silence each began to indulge his own particular reveries. Brian was very anxious to learn beforehand the purport of this journey. He had a shrewd guess respecting their ultimate destination—felt quite convinced that they were going to Tickhill ; but what for ? Wine, in those days as now, made some men confidential ; but the Squire was more than usually chary about revealing his object. "Brian," said he "we are going to Tickhill, on a little private business of my own ; let that suffice." So the serving-man was obliged to restrain his curiosity, and the pair lay an hour or more on the cool grass, under the spreading oaks, each quietly revolving his own surmises.

When the horses had been allowed a moderate rest, the travellers again set forward, hoping soon to regain their lost track ; but the further they went the more difficult did their situation appear. But after a while, a thin column of smoke was perceived, curling upward among the trees. "Humph !" said Brian, "there is cookery done there." Journeying towards the spot, our travellers caught sight of the most primitive hut or cabin that ever was seen. It stood on a little hillock encompassed with trees ; and a few yards further on was a brook of very clear water. The cabin was scarcely ten feet high, built of stakes driven into the ground, the sides being further strengthened with rough boughs crossed obliquely, while all the top, save a hole where the smoke poured through, was roofed with sods : verily, it was a most cosy-looking dwelling. Then out rushed a dog, in size and strength more than a match for their hound, which had encountered the boar ; so

that it became difficult to prevent a fight between these two growling antagonists. The horsemen bawled, and menaced vengeance with their arms; but that canine defender of the cabin would not soon have been quieted had not a young and beautiful woman introduced order upon the spot. "Verga," she said, quietly but firmly, "come here." Then pointing with her finger to a certain spot added—"Lie down, Verga: good dog!" Verga growled and whined no longer; but although he lay down, with his nozzle upon his paws, there was an uneasy, suspicious language in those ever watchful eyes. The slightest menace of his mistress would have awakened all the dog-fury within him.

Had the real goddess Diana as suddenly been revealed, the vision could scarcely have more excited our travellers than did this young and beautiful woman amid the tangled solitude of these woods. She bent downward her eyes, but made no greeting, as if to convey an impression that the intrusion was personally offensive—women in all ages have had this intuitive method of conveying information by silence. While thus standing, in noble modest dignity, her long hair, which would have reached far below the waist, being tied into careless clusters by the fresh tendrils of flowers, 'Squire Roger made an obeisance amounting almost to reverence, while Brian thought within himself that he had never before seen "ladie" so beautiful. Her dress was a loose robe of soft stuff, nearly concealing her sandalled feet, but leaving the arms, neck, and much of the shoulders open and unimpeded—a dress at once simple, but admirably adapted to set off a voluptuous form.

Roger Fitzhenry was the first to break silence, by telling the lady that they were journeying towards Tick-hill, but had lost their way, and had been guided hither by the smoke, in hope of being directed towards the right path.

"That path," replied the lady, "will not be easy to find. My husband (she laid a nervous emphasis upon the word *husband*) is absent, or he would willingly have acted as your guide." Then, after a slight pause, during which the 'Squire's face underwent a close scrutiny, she added—"But I expect him shortly to return, and am even now preparing our simple meal; perhaps you will share it with us."

'Squire Roger thanked the lady in terms as sincere as they were courteous, stating how they had taken a slight repast but a short time ago : he would wait, however, and gratefully acknowledge the services of her husband as guide.

Scarcely was this sentiment uttered, before another large dog came bounding towards the cabin, and presently a fine stalwart man appeared, who evidently regarded our travellers with no complaisant feelings. But after a little explanation the strangers were treated as guests, and, having secured their horses, went forward into the hut. Even Verga began now to banish his suspicions and offered friendly greetings to his canine visitor. This cabin, in its internal arrangements, was by no means devoid of comfort, or even of rural ornament, betokening the presence of a virtuous and contented woman. The walls were neatly lined with dried forest shrubs and grasses. Some loose dried grass covered the floor, upon which stood a bench, most curiously constructed of gnarled boughs ; also a rustic stool and table. An old iron pot was simmering over a bright wood fire, giving forth an appetizing perfume. But how was this pot conveyed into the deep recesses of such a forest ? The procurement of this pot, together with two or three rude articles of earthenware, might furnish themes for a thrilling narrative : but even if these could speak one must not listen, as the subject is not relevant. One bowl there was of wood and very capacious, into which the seething mess was dexterously poured. The guests were served each with a wooden platter, and a pair of sticks, one resembling a spoon, the other a large skewer ; some coarse bread, formed of bruised rye, and a pitcher of clear water from the brook were placed upon the table, and the feast commenced. The strangers never dreamed, I ween, of a witches' cauldron ; still it were difficult to tell of what that steaming mess consisted. It was not venison ; it was not swine's flesh ; there was a fowl in it, perhaps a hare, perhaps some badger—anyhow it was very unctuous. There was neither wine nor beer to offer ; but when the eating ceased, our travellers produced that which the lady refused to taste, but of which their host partook, and thus drinking a stronger sympathy was

infused amongst the trio. At length Roger Fitzhenry brought out the enquiry which had long been hovering upon his lips.

"My kind friend," said he, "why do you hide here in the wild bosom of the forest?"

"Because Nature, however wild, is purer and more righteous than our kindred who came over the sea. Kindred? Ugh!"

"A good answer. I begin now to discern a faint glimmering of light; some one has oppressed thee; there has been outrage committed."

"Not on me so much, as to one who is dearer to me than life."

"Skin for skin.—What is it the priest says, Brian?"

"'Skin for skin; all that a man hath will he give for his life.' Thus spake a wise man of the olden time."

Then, calling to his lady, the forester said, "Tell a little of thy sorrow to the stranger, Elfy" (her name was Elfrida).

Elfy said, "No, if spoken at all it were fittest for thy tongue, Geoffrey."

"Thou could tell it best," replied he, "because the cruel wrong has burnt deeper into thy soul."

Elfrida hesitated with *maidenly* reserve, and blushed. But just as resolution to begin the task beamed in her loved one's eyes, she raised her head, and, with a slight frown on her classic brow, which showed the heroic mind, related thus her history—

"My first recollections are of a fruitful spot, where the sheep grazed and oxen went forth to plough. And near to our cottage was a sweet valley wherein a palace stood, which I thought had been built by the angels above as a temple for the pious monks. Oh! it was a beautiful place, and so great. They called it by the name of "Our Lady of the Rock," because the hills towered upwards on either side, and the blessed Virgin's protection was vouchsafed to this Abbey. The holy men who lived there were possessed of such power that by prayer they could remove sickness, and were so wise that they could discern evil thoughts; and they could forgive sins. Thus I thought, and thus we were commanded to believe; but may the great God in heaven pardon my sin if I misjudge them, for they did things

which were not pure ! I had a lovely sister once, who was commanded to go a pilgrimage. She went, but never came back.

* * * * *

“ Childhood seems to me now but a short dream—the days when I used to lie on the grass, tearing wild flowers into fragments (I remember how my sister used to charge me not to wander beyond the hollow tree, else the *bogies* would carry me away), romping with Tiger, the wiry-haired dog, and in the evenings falling asleep on my father’s knee. When I was nine summers old my sister Eleanor was seventeen, and then she was forced away. My father first suspected, then complained ; and thus brought upon himself only persecution and heavy penance. Although as sound in body as he was pure in heart, hidden griefs wore him painfully away. Alas ! even before grim Fear foreshadowed the event, my father had died. He was the last male descendant of the Cerdics, a race honourable in the blessed days of Edgar and of Edward. Women count as nothing ; or at best, are made the victims of man’s lust and avarice : but pitiable is the life of widowhood. There was a difference felt soon as my father died ; but we went on tilling the land with the help of those old slaves who were attached to the soil. Thus passed some four winters, until one day mother said, “ Elfy, a Knight of Tickhill Castle has been here asking for thee. Keep close concealed, my daughter, for his object is plain.” “ Mother,” said I, “ Geoffrey has spoken plain, and lovingly.” “ Be true to Geoffrey,” replied my mother ; “ for he is an honourable man.” So I hid myself, being afraid even to look upon a strange face. But Geoffrey came frequently to our house ; and several times I walked out with him a furlong or so, in the evening, before we parted. On these occasions we were evidently watched, for one night we had just separated, and I was tripping merrily home, when two ruffians sprang from beneath the shadow of a tree and said I must go with them, where a more noble lover was waiting my appearance. They vowed neither to molest nor insult me, providing I went quietly : but go with them I should, either willingly or by force. “ Never,”

I exclaimed, "while a throb of life can animate resistance!" whereupon I raised a cry which I thought must reach my true lover's ear. And Geoffrey did hear it, for he soon rushed to the spot. Then a shrill whistle from one of the ruffians was answered at a distance—from a scout, as we supposed; but before he could join his comrades one of our foes was lying senseless on the ground. Unfortunately Geoffrey received a dreadful cut in the neck (shew the scar, Geoffrey), and while my brave defender and the other ruffian were struggling in a mutual deadly grasp, I seized the fallen man's sharp weapon. Just then the third antagonist came up, and, (Heaven forgive me if the deed was wrong!) I plunged the dagger deep in the villain's heart."

"Did he die?" enquired Roger.

"In a short time he died. The other assailant now took to his heels, shouting that a deep revenge would follow, for I had killed a De Enville. We fled together; and could live here all our days, if God protects my mother."

"But there is one wish unfulfilled, my Elfy," said the brave hearted lover.

"May I ask what that desire is?" enquired the 'Squire.

"That a priest would step this way, only once, and be prevailed upon to marry us."

"Amen," said the 'Squire.

CHAPTER III.—IN WHICH THE JOURNEY OF ROGER FITZHENRY IS CONTINUED.

Our travellers would not stay all night at the forest hut ; the 'Squire was often pressed to remain, but he refused. Was it because he feared the inmates, who, having divulged that terrible secret, now meditated private assassination—for dead men tell no tales? Such an idea never entered the head of either Roger Fitzhenry or Brian : they had too high an opinion respecting the uprightness of their entertainers. Was it from fastidiousness, and because the cabin was deficient in sleeping accommodation? Scarcely so, for they were robust men, inured to peril, and, at times, acquainted with very bad lodgment. Moreover, they had observed two private doors leading to some inner rooms : would there not be separate dormitories, one for Geoffrey, the other for Elfrida? The guests might thus be accommodated either with their host's separate grass-bed, or sleep, well enough, on the dried leaves in the room where they now sat. The true reason why the 'Squire would not stay was that he intended to reach Rufford Abbey before sundown. So, after taking a parting cup with the forester and a fervent kiss of the fair Elfrida, Roger started on his journey. Their host went with them a few furlongs, and put the travellers in the right tract ; but a dozen miles, at least, separated them from the monastery where they meant to halt.

When they were again by themselves in the heart of Sherwood Forest, the brow of Roger Fitzhenry began to lower, and he became more than usually taciturn ; silent he was, and deeply brooding. After half an hour's ride the path became distinct enough, and no marvel, for paths to a monastery are easily determined. So they ambled on in silence, and presently the dark, intricate wood opened out into clear vistas of green-sward, with here and there a patch of corn-land, and hovels for oxen, and, at scattered intervals, a herdsman's hut. A few furlongs further and the Abbey of Rufford appeared to view—a stately palace in the wilderness, at sight of which the face of Roger brightened, as if some prize was nearly to be won.

"Brian," said the 'Squire, "we shall rest here for the night : keep on the watch, and ascertain if ever a strange lady has passed these portals during yesterday or to-day."

Humph ! said the astute Brian to himself, I thought there was a woman in the case.

"But be very discreet, for thou knowest, or ought to know, that there is but a short step between liberty and a dismal death-cell."

"I know," replied the sagacious Brian.

Rat—tat—tat. [*A faint echo, and a long silence.*]

The sound of a heavy bolt drawn back arrests our traveller's attention, when an ugly, sour visaged man, with cropped hair and beard, confronts them at the wicket.

"Benighted, we crave hospitality," the 'Squire said. "Furthermore, I have matters of importance for the Abbot's ear."

The grim porter bowed, but uttered not a word, stepping aside as a signal that they might pass.

"But our horses require the first care ; they are jaded, as well they may, for we have travelled a long and devious way since this morning's sun rose."

Here-upon the porter struck twice a kind of gong, or metal pan, and the sound had scarcely died away before two slaves of tall, athletic form made their appearance, whose muscular power would render them formidable antagonists in any private fray. The porter pointed through the doorway, where the horses stood, but still said nothing. The slaves seized each a quadruped, and were leading them away, when our serving-man interposed—

"By your leave, I always see the horses properly cleaned, fed and bedded for the night." So he followed them to the stables.

The Abbey *villeins* groomed the nags, under the superintendence of our 'Squire's retainer, and were by no means loath to partake of a little wine from the leathern bottle, while Brian, to encourage good-fellowship bid them drain the last drop, since his master was well able to pay for a replenishing. So they drank it gladly, and became rather jovial over their work.

"Many travellers passing this way ? O, by-the-by,

there is a holy friar named Durden, who should be even now on his return to Tickhill—I have a certain message to communicate on meeting father Durden.”

One of the slaves instantly dropped a wisp of straw with which he was belabouring the horse's hide, and gazed anxiously into the speaker's face.

‘I have got on the right scent, thought Brian, without, however, betraying the slightest alteration of manner.

“Father Durden,” he continued, “is a man lusty in form, and in the prime of life, but of rare learning, and, withal, very pious. I would give a groat for five minute's conversation with this holy man.”

“Present cash?” enquired the slave who was addressed.

“Cash down; and thanks into the bargain.”

“He is staying in the Abbey at this very moment.”

“Thanks; here is the money. Is he alone?”

“There is no man with him,” replied the slave, who now proceeded to rub vigorously at the horse.

“I have heard,” observed Brian, “that he is charged with the escort of some rich lady. Not that the matter is of any consequence either to my master or myself, but I heard that he left Nottingham in company with a young and beautiful damsel. Doubtless his object was to place this lady in some holy retreat, and thus assist her vows. How noble the devotion when young maidens, rich and beautiful, whose instinctive life seeks nourishment from the pulses of sensual desire—how wonderful that such persons should reject all the allurements of society, and become—what? holy sisters, recluses, nuns!”

The aforesaid slave subdued an ugly grimace as he kept rubbing the horse, but made no answer. Just at this moment was heard outside the hurried pattering of horses' feet.

“More travellers arriving,” observed one of the slaves.

“‘May be departing,’” suggested Brian, who hastened at the same time to the door. It had grown almost dark, so that Brian could dimly discern what seemed a ruck of men and horses; but their movements were hasty and mysterious. They will surely halt at

the portal, thought our man-at-arms; whereupon he dodged under a wall to reconnoitre. Presently a couple of men appeared, leading or rather carrying an unwilling victim.

"You may force or mutilate my body," a female voice exclaimed, "but the spirit will resist! O God! is there no present note of vengeance? How long shall men outrage the purest feelings of humanity under the cloak of religion? Alas! virtue can expect no earthly protection, when the sovereign lord is an unprincipled libertine, too sensual to govern with equity, and too weak to preserve social order."

"Bah!" replied a gruff voice, "stop this prating. It is enough for a woman to obey her lord's behests. Adam was created for God, and the female for Adam. Has not the great Apostle enjoined—'I suffer not a woman to controvert the man, but to render obedience at all times.' The world could never be governed if women are not passive. Woman, thy beauty and thy graces were designed to smooth the brow of care, and with voluptuous arts redeem an hour from man's severer duties. Then with thy body do me worship."

Another voice chimed in with canting tone—"Be gentle, lady, deftly kind and docile; for gentleness and love are woman's mission; her only path to happiness below."

"Gentle and loving!" exclaimed the female voice, "kind and docile, when cruelty and rapine sours the mind? Ye preach like arrant knaves. Fraternal yearnings cannot thus be stifled. My father! * * * And yet 'tis better thus. 'Tis better that he never knew the fate which now awaits me. But, true as a righteous God exists, a time will come"—

"Here, stop this prating. To the saddle with her. The jade has been spoiled by mistaken kindness; a few days' solitary confinement will tone down her temper. Then, methinks, she will appreciate our favours. Pass the thong round the damsel's waist—a little tighter. Randolph, I make thee answerable for her safe custody. Now on to Tickhill."

Did Brian, our man-at-arms, hear all this, and passively skulk under the shadow of a wall? He did. Brian, besides his natural shrewdness, was not unmind-

ful of the squire's remark ; felt that he could do no good by opposing force, but might rather get himself into trouble. The squire's man went back to the stables, but his mind was intent on this captive lady, for he compared the passing scene with some circumstances which had recently transpired at Nottingham Castle. The Abbey slaves were just finishing their work by the aid of dim smoky torches ; but he who had bartered news respecting the friar seemed ill at ease.

"Master," said he "you will not bring me to harm for telling about father Durden?"

"Not I," replied Brian, upon which, fastening the stable door, all three walked over to the Abbey. But how was he to get a few words privately to the Squire's ear ? This was the question which perplexed our serving-man. It was long past any regular meal-time at Rufford Abbey, but on being conducted by the porter to the common room, some victuals were served to the benighted visitor, together with strong ale in a black leathern jug. Now, victuals and Brian never went awry ; so he set himself to eat with a zest as if this had been the second instead of the fourth meal that day. Still, as he champed his beef and bread, and took large draughts of that nutty brown ale, his knowledge troubled him, and he would almost have given a double tooth for five minutes' conversation with his master. After a while there appeared a figure grim and taciturn, who lighted a supplemental torch, and said—"The master bade me tell thee to have the horses ready two hours after sun-rise."

"But I must see him before I sleep," replied Brian ; "so I pray thee conduct me to him at once."

The grim figure shook its head, adding—"That cannot be, for thy master is privately engaged with the Abbot."

Not a word more would the figure speak, but made a bold gesture of impatience, waiting to conduct the guest to his dormitory. The latter saw no alternative but to obey ; so he followed the guide through long vault-like passages into a small, strong cell, where any evil or bloody deed could be done securely. Pooh ! it was a simple dormitory, and the attendant held his torch aloft to show him the relative position of certain articles in

the room. The guide then vanished, carefully closing the door, still without expressing a courteous wish or parting benediction.

But how fared Roger Fitzhenry at the Abbey of Ruford? Most hospitably as regards feasting and wine-bibbing; it seemed as if the Abbot and superior monks took a special delight in making his visit comfortable. He was kept in total ignorance respecting the close proximity of father Durden, however; never heard a whisper concerning that mysterious night-fitting, or knew that the beautiful captive was ruthlessly transported hence until he met his servant Brian, in the morning.

CHAPTER IV.—DISCLOSES ROGER FITZHENRY'S OBJECT
IN VISITING TICKHILL.

To comprehend the object of Roger Fitzhenry's journey, it will be necessary to go backward a little, both in respect to place and time. TIME—*Thirteen days ago.* PLACE—*Nottingham Castle.*

Thirteen days ago Father Durden arrived at Nottingham, knowing well that all the good cheer which the Castle contained would be freely offered to a son of the Church ; and dearly did "the oily man of God" like the good things of this life.

"The man that lives godly is sure to live well.

So freely had he been entertained that the visit of a night, as at first proposed, had been prolonged nearly a week, and still seemed as far as ever from being ended. The holy father, at this time, was merrily carousing with 'Squire Roger, flavouring his tales of church scandal with liberal potations from the wine cup. It was drawing towards evening, on a dull day which threatened to be stormy, and heavy drops of rain began to fall.

"There's no chance of your leaving the Castle yet," said Roger ; "you see the heavens and the earth conspire against travelling."

"But, good Roger, our holy Mother Church has her calls which cannot be neglected. I am on my way to Rufford Abbey, as you know ; from thence to Tickhill."

"But you are not going to stay at Rufford Abbey?"

"No, I shall stay but a few days there. The Blessed Virgin, through the most holy Pope Innocent, deposes me to remain awhile at Tickhill."

Both priest and layman payed involuntary homage to the name of Christ's Vicar on earth, the most powerful ruler that ever rose in Christendom.

The rain was now descending in torrents, beating impotently on the grim Castle walls, the howling wind forming a wild symphony to the coarse jest and boisterous laugh within. But just then a loud knocking at the Castle gate was heard above the raging storm. Suddenly a messenger entered, bringing intelligence that a French merchant was lying outside at the point of

death, and that his daughter claimed for her father and herself hospitality from the Castle. 'Squire Roger rose hastily, and bidding his messenger lead the way, prepared to follow him through the pelting rain. The priest also started up at the same instant.

"It behoves me, one of her humblest sons, to be ever ready to administer the holy ordinances of the Church," said Father Durden.

"Then let us proceed together," added the 'Squire, "and perform those kind offices of charity and religion which the distressed or the dying may require."

They were conducted outside the gates to a dwelling occupied by a *villein*, who had charge of the feudal beeves. There both Roger and the priest started to behold the figure of a pale emaciated man stretched upon a bed of straw, with his head supported by the arm of a beautiful young woman, who knelt at his side. Their entrance was scarcely observed ; but the 'Squire gazed, spell-bound, as at an apparition from the celestial world. The countenance of the sufferer wore a blended expression of tenderness and anguish : there was a wildly anxious gaze in the daughter's dark and lustrous eyes.

"Brian," said Roger Fitzhenry, "help me to carry the poor man as carefully as we can to the Castle ; more assistance can be rendered there."

"No, no, good host," replied father Durden, "it would be his death to remove the sufferer on such a night as this. I must use my prerogative, and command you to let him remain here."

The 'Squire insisted upon removing the strange merchant at once, and was tucking the straw into a kind of litter for the purpose, when the friar became so vehement in his opposition, and so alarmed the young lady by dwelling upon the possible consequences of such a step, that Roger was compelled, very reluctantly, to postpone the attempt. Never, perhaps, had the latter felt more disappointment and chagrin, particularly when a hint was given him that he, the friar, required to be alone with the dying man, in order to administer those rites which the Church had provided : so Roger Fitzhenry returned with his servant to the Castle.

What passed between the friar and the merchant may

be imagined, but cannot fully be described here. The priest learnt, however, that the sick man was possessed of much wealth, which was, for the most part, secure in the possession of certain French merchants, at present in England, the whole of which, should he die, would revert to his only child, who was the companion of his journeyings. The sufferer confided to the priest a few special provisions which he wished to make for his daughter's future welfare; secrets which, we need scarcely premise, were entrusted to an eager but treacherous listener.

Next day the merchant seemed to have rallied a little. Roger was early in attendance, and renewed his solicitation to have the sufferer removed. But the priest opposed more warmly than before, and was again successful. From that moment the 'Squire took a strong dislike to friar Durden, especially as the priest would scarcely ever leave the sick man's presence, and seemed impatient of Roger's intimacy with the strangers. It was ever a futile aim to intimidate Roger Fitzhenry, or divert from him a cherished honest purpose; thus it happened that when the 'Squire approached the friar sulkily retired: but very soon Roger established for himself a friendly intercourse, sharing the confidence of the merchant and his daughter more fully, and far more worthily than the priest.

Several days had thus passed away, and Roger began to entertain hopes of his patient's ultimate recovery. One evening, after a lengthened interview with the priest, alarming symptoms were exhibited by the merchant. In those days priests were almost the only doctors; friar Durden prescribed in this particular case, but the merchant died.

Strange to say, next morning when Roger Fitzhenry called, he found only the common inmates of the dwelling with the corpse of the merchant. The whole truth now flashed upon the 'Squire's mind and he resolved that, cost what it might, even if it cost his life in the attempt, he would have condign punishment for that infamous friar. But deep resolve is never rash or hasty in the means it employs to attain its end. He thought long and calmly upon the measures to be taken, while his meditations took such turns as these—

This bad Durden is a priest of the Church, and the Church has all power in heaven and on earth. The priest doubtless counts upon having the Church's sanction or connivance, because what he has done may add wealth to the Church. But will the Church really endorse the act? And then passed in review through Roger Fitzhenry's mind the state of affairs, civil and ecclesiastical, at that juncture. At that time English commerce had scarcely an existence, but political circumstances united our country very closely with France. The little trade that was done in England at this period was chiefly carried on by travelling French merchants, who in the existing condition of public affairs often regarded themselves as the ruling race.* The victim of priestly cupidity was the daughter of an influential Frenchman. Pope Innocent was on the point of offering the English crown to Philip of France. Here was an occasion when an outrage perpetrated on a French family was most likely to find redress. But, first of all, it was necessary to deliver the young lady, from personal violation, it might be, or a secret and life-long imprisonment, or an untimely death: to this end he must beard the regicide priest in his lair. And now, by your leave, reader, we will continue our journey.

When 'Squire Roger heard from his serving-man what had taken place during the night, he made all possible haste to reach Tickhill. There were few public highways, and no toll-bars in those days, so it was highly improbable that he would gain any information by the way-side: moreover the lady's abduction from Rufford Abbey took place under cover of night. And yet the pursuers did gain a little information. Verily, I think there is often more than a blind casualty in bringing things to light! 'Squire Roger came upon a man who was tending cattle, for we must remember there were no enclosed pastures at that age of the world

* No doubt, on the other hand, considerable prejudice was shewn by the native population to these wealthy foreign traders, while the laws in relation to commerce were both arbitrary and absurd. If a foreign merchant died on English soil in debt, his creditors had power to seize the person of any one of his countrymen found here and put him under arrest, until he had discharged all the deceased insolvent's liabilities.

—Had he seen or heard of any persons travelling that way during the night?

“During the night,” replied the herdsman, “I was lying under a tree, and it was nearly dark, so that I could not plainly distinguish the cattle which were dozing and browsing around. Presently I heard the snorting of a horse—for animals are quick to recognise the presence of a stranger. Do you think the horse could see better than we can in the gloaming, or did it smell me?”

“I cannot tell,” replied the ‘Squire, “but go on with the narrative.”

“Well, I lay perfectly still and concealed, not knowing whether there were night-marauders after our oxen and the red-deer, or whether they were honest travellers who had some weighty reasons for urging their journey at that untimely hour. They passed—three or four horses and their riders—within a stone’s throw of where I lay, and I heard the voice of a female in up-braiding tones, but could not distinguish what she said. Just then the horses were put into a quickened pace, but it was a great while before the last footfall died away, for sounds come from a great distance on a still-night.”

“And you have no idea who these horsemen were, or whither they were journeying?”

“Not the slightest,” replied the herdsman, “only I doubt they meant no good but evil to the woman in their company.”

“Perdition seize them!” exclaimed the ‘Squire, as he urged his horse to a quicker pace.

Our travellers halted not until they came almost within sight of the rich and prosperous town of Tickhill. A short distance from the town—what one would now call a mile or a mile and a quarter from the Castle mound, four horsemen made their appearance from under a thicket of trees, and commanded our travellers to halt. Had there been any pressing necessity to fight, there is little doubt but ‘Squire Roger and his stalwart man-at-arms would have hesitated not a moment about the odds. But so far as they were concerned nothing could be gained by a broil. Their approach had evidently been descried by the castle-guard, and these four horsemen had come out to reconnoitre. Had the strangers

been traders, with money and merchandise in possession, one cannot tell what might have happened ; but being soldiers, and one of them a man of quality, probably with some special mission to Tickhill, the case bore a different aspect. But what took place ? Did the Tickhill soldiers lift their helmets or military head gear as signs of courtesy ? No ; that custom was not then in fashion : they made a lane for our horsemen to pass, 'Squire Roger first, then his servant ; but cautious both, ready for either a word or a blow. But did the Tickhill soldiers look on and say nothing ? You shall hear. When the 'Squire was fairly athwart them, their spokesman broke silence saying—

“ Prosperity attend your mission.”

Whereupon Roger Fitzhenry made answer—

“ May the Holy Virgin regard all honest folk ! ”

“ And think ye we are not honest,” replied their spokesman.

“ I hope so,” said the Squire. “ But do ye serve the brave and noble Mordaunt ? ”

“ We do,” replied the men in chorus.

“ Then lead the way, for I must have speech of him.”

In sooth it was but a petty cavalcade, in times when many a gorgeous train was wont to honour this neighbourhood with its presence ; but the event was just sufficient to excite some curiosity in the good town of Tickhill. On the outskirts there were men shearing sheep, who halted over their clipping, and gazed furtively at the strange horsemen. Had they not been manifestly soldiers, the wool-grower, who stood amidst the snowy fleeces might have speculated upon a customer, for little or no part of this wool would be locally spun, but bartered either through some resident or casual merchant, and thence exported into Flanders. The town lay chiefly around the Castle walls ; but our travellers passed one dwelling of nobler pretensions, where the wealthy Clarells lived—a stone building with an upper story or second floor, which latter was gained by a strong flight of steps from the outside. The bulk of houses in this famous town, however, were low one-storied buildings, some of rubble and plaster, but most of them formed of wood. From nearly all of these dwellings a face or two might be seen, peering through

the narrow loop-hole windows, or through the strong oaken doorway, and were we to recount one-half of the gossip which this visit awakened, that alone would fill many a page. The skinner hurried to the shop, or shed, as we should now term it, of him who made leather garments, and hazarded an opinion that news of great moment was just brought down from the King.

CHAPTER V.—GIVES A CAPITAL RESULT TO THE JOURNEY.

Our travellers, with the four scouts, soon halted under shadow of the huge castle-mound of Tickhill, a hill not then as now forming a dark canopy oftrees; it bristled with a vast area of embattled walls, surmounted with towers, above which rose the strong and majestic keep. This grand fortress had then suffered but little mutilation either from time or siege. When near the barbican one of the strange horsemen blew from his horn a certain note; the draw-bridge was speedily lowered, the portcullis raised, and Roger Fitzhenry, with his man-at-arms, passed under the massive arched gateways straight into the inner court. Here they were met by the keeper of the castle, Albretch de Mordaunt, and the greeting between the two squires was most hearty and fraternal.

“Right glad am I to see my gallant friend Fitzhenry, especially at this juncture, when all the chivalry will meet but two days hence within our famous tilting ground at Blythe. But, it may be, some public or private object of great moment has brought Squire Roger to Tickhill.” Then, bidding him dismount, the Governor conducted his guest with all due honour into one of the principal dwellings situate under the castle wall, where they laughed and jested in all the exuberance of friendly glee. Almost before the guest had doffed his armour a stoup of wine stood ready to be quaffed, and the good liquor did not wait long unappropriated.

“Roger, my boy,” said the host, “Won’t we have a merry time of it? I’ll wager a butt of wine that our Yorkshire boars for size and courage beat anything that can be found in all Sherwood.”

“I accept the bet,” replied Roger Fitzhenry; “there are not such swine in all the world as lie concealed within the vast solitudes of our own forest.”

“But they are so numerous here,” added the Governor, “and must be thinned. Never, in my life time, did I see so many litters of pigs. Moreover, in winter time, their presence brings large packs of wolves into

the neighbourhood ; thereby endangering better cattle, and even the lives of men, women and children. I have seen portions of garments on the snow where scarcely one of the wearer's bones was left uneaten. How can one man, or even two or three together, stand up against a pack of ravening wolves ?"

"Then exterminate the pigs, by all means," replied Roger.

"By-the-bye there are a few herds of splendid wild bulls and cows grazing in the valleys down towards the river ; these would afford more sport than swine-killing, besides which the carcasses would be worth carrying home. Suppose we have a general bull-hunt ?"

"Quadruped hunting is not my business at present ; I am in search of nobler game."

"Phew !" ejaculated the Castle-governor.

But Roger disclosed the real object of his visit, telling his friend under what circumstances the foreign merchant died, how the priest had abducted the merchant's daughter, how he had tracked them from Rufford towards Tickhill, where he knew the friar then was, and intended to stay, probably for months. The Castle-warden listened with some interest to this recital, and when his guest asked whether anything was known here respecting Friar Durden, Albretch de Mordaunt replied—

"I have certain information that a strange priest arrived here soon after daybreak with two horsemen, and a lady was in their company."

"And have they lodged her in the Priory of Tickhill ?"

"Not at present ; she is now securely kept at the house of Sefton, who tills the Prior's field : where her ultimate destination may be is uncertain."

"That," replied our 'Squire, with smothered rage, "will soon be left to the free choice of the lady herself, or a bold resolve shall never stir me more !"

"Fortunately the damsel is not lodged at the Priory, or any attempt to deliver her might be fraught with risk ; as it is, I will aid thee, and afterwards be most willing to rejoice at the nuptials."

In vain Roger assured his friend and host that he mistook the aspect of affairs, that he (Fizhenry) was ac-

tuated only by pure chivalry and public weal, the sharp-witted Mordaunt shook his head and smiled ; the resolution to assist, however, was apparent enough, so they set about devising some feasible plan whereby they might gain access to the captive. 'Squire Roger advocates an immediate storming of the dwelling ; his companion manifested less fervour but more craft, being uninfluenced by the same personal feelings which actuated his guest.

"Be calm and reasonable ; leave the plan to me, and before next day's sun throws a slant beam across the castle-wall, I'll place the captive lady's hand in thine. Is that sufficient ?"

"I'm fearful that the crafty Friar will yet outwit us. You little dream of what a prize he holds, despite the pelf. Ten hours !—it seems to me an age."

"But see, I'll put a secret guard upon the dwelling, and neither priest nor robber shall approach. Is that sufficient ?"

"Good. I can doubt no further."

So the two friends drank and feasted all that day ; still, although Roger Fitzhenry drained many a goblet, his inner thoughts clung, perturbed, to the merchant's daughter. At length night came on ; but it was one of those ethereal evenings which never get dark ; just a thin film or haziness overspread the earth. The Governor of Tickhill thus lightly addressed his companion—

"Most gallant squire and lover, the dust and travel stains must be put off, or the disconsolate maiden, even if prepossessed in thy favour, may vouchsafe but a distant greeting. So pray'the get washed."

Then after a moment's scrutiny the host continued—

"Thy vest and body raiment are so so, when cleared well from dust ; but I must rummage through my own wardrobe to supply a gayer tunic."

"Nay, good Mordaunt, though somewhat worn and dim the tunic serves its purpose. Is not a brave front and a warm heart better than gay tunics ?"

"But when men seek a lover they should dress with dainty art."

"Tush ! I tell thee once again my object is not personal, but philanthropic."

"Phew !" ejaculated his unbelieving host.

It was so, despite those asservations Roger Fitzhenry cleansed and dressed himself with more than ordinary care, accepting the loan not only of a rich tunic, but a good pair of tights. The appearance of our two Squires differed in a remarkable degree ; he of Nottingham was not so tall nor broad, but much more active, with limbs well proportioned and firmly knit. His face, though somewhat browned by scorching suns, was naturally fair and round ; his hair was of a flaxen hue, but soft and curling. The Tickhill Squire was an athletic man, in height above six feet. But what a breadth of chest, and what an arm ! His hair was dark and wiry, cropped close ; while his broad jaws and small compressed mouth were half concealed by a fierce moustache. In truth this Mordaunt was no "ladies' man."* The castle-warden of Tickhill made little alteration in his body-gear, but enveloping himself in a loose monkish garment and drawing the hood closely around his head bade his comrade keep thus by his side ; then, having exchanged a few words with the sentinels he led 'Squire Roger forth into the sleeping town. Not one human being did they encounter, and, save the distant bark of watch-dog, and the occasional lowing of an ox, silence was all around. Presently they turned from the main street or road into a narrower pathway, skirted with giant trees, and could dimly discern a broad dark building on the left side of the lane. Halting for a moment, and hearing nothing astir, Mordaunt raised to his lips a kind of pipe or reed, and drew forth a sound much resembling the note of some bird. It was speedily answered at no great distance. Soon rustling footsteps were heard, and a tall man emerged from out the shadow of dim trees. The

* And now the reader smiles—one of those racy, self-sufficient smiles, which says as plainly as the face can speak, "Ha, ha ! I have caught the tale-teller at last in his own paradox ; thus—if those two men differed so much in girth and height, is it likely that the lesser man would wear the other's clothes ? Certainly not, nor is it so recorded. Festival or holiday suits were costly in those days, derived sometimes by inheritance, but oftener by plunder ; for even highway robbery was then considered no disgrace, and was commonly resorted to by the retainers of feudal lords as a principal source of income.

scout—for such he was—stood silent, waiting to be questioned, when the Castle-Warden asked him if any communication had passed between Sefton's house and the Priory

“About an hour ago, I traced a monk down the pathway.”

Roger grasped the hilt of his weapon and ground his teeth.

“And where is the monk now?” enquired the Governor of Tickhill Castle.

“A prisoner at no great distance, held by grim Gurth and Rolf with the falcon's beak.”

“It is well done,” exclaimed 'Squire Roger; “bring the craven priest before us at once.”

But Mordaunt countermanded the order, saying, “Nay, let them keep him quietly and secure for the present: just now he would only be an encumbrance.”

“The friar will cause no alarm, I vouch,” replied this messenger, “for Rolf, who swears that his priestly garb is all a disguise, has already threatened him with six inches of sharp steel if he makes the slightest resistance. Rolf, for some private reason, hates the very sight of monk and friar.”

“Retire to ambush,” replied his master, “until thou again hearest the bird-call;” so the messenger vanished by the same way that he came.

“Now what shall be done?” enquired the impatient Roger.

“Follow me in silence, and all will be well.”

Now it happened that when they came near the outward paling of the Court—for that house was environed by a stout wooden fence, intended, evidently, to confine cattle, that a man stepped forth through a narrow wicket, who was immediately recognised by the Castle-Warden.

“Well, Beorn, did you get speech of the lady?”

“Yea.”

“How?”

“As before mentioned, Zilpa, the maid-servant and I are near of kin; therefore free access to the house was afforded me. At the first opportunity I gave Zilpa a full account of the whole matter, and begged her to grant me a secret interview with the captive. But this

she positively refused to do, fearing the ban of holy Church. Then I told her that if my mission was frustrated you would come with a *posse* of armed men and burn their building to the ground ; on hearing which she became alarmed, and, after unfastening a certain door, left me solely to my own devices. Not wishing to obtrude hastily and presumptuously into a lady's presence, I knocked, but no answer came ; then, after having opened the door a little way, I said—"A soldier of Tickhill with greetings from the Governor of Nottingham Castle, humbly craves an audience." A voice, in firm yet mournful tones, replied—"I, who am a prisoner, can refuse no man admittance, even though I suspect in this intrusion some further persecution from a Priest." Hereupon I entered, and the sight of so much loveliness and grief—"

"Eschew all unseasonable comment," replied our 'Squire, hastily, "and tell us whether the lady is willing and ready for an audience."

"Yea," replied the man, "ready and willing."

"Then bear a honourable message respectfully ; inform her that we are waiting to give aid and protection."

The gallant Squires were not kept waiting long—not more than two or three minutes ; and when the lady, half-hidden behind the huge form of their messenger, caught sight of Roger she sprang convulsively to his side, and grasping his arm exclaimed—"Save me from a degradation which is worse than death."

Our 'Squire restrained himself ; his first impulse was to elasp her in his arms and say—Nor earth nor hell shall ever part us more, while life endures. But he restrained himself, for the thought arose that perhaps all which was required of him, and all that the maiden would deign to accept, was simple deliverance and courteous protection. So he assured her of safety, and asked whither they should escort her, offering safe guidance to his own castle of Nottingham, where the remains of her father were waiting interment.

"Heaven help me !" cried the maiden, "for forty hours my destiny appears like a painful dream. Now I have found friends, lead me at once to my father's

corpse." And the lady sobbed as if her heart would break.

Three horses were in readiness at the castle-gate ; then, after a meal more cheerful than any the lady had taken since her father's illness and death, they prepared for the journey ; our 'Squire donned his armour, the attendant arranged the trappings, the parting cup was taken, they sprang into the saddle, and Roger Fitzhenry, turning to his beautiful charge, gave an assuring glance which beamed with delight. The Tickhill Governor, smiling waved adieu.

But did he, Fitzhenry, marry the French orphan after all ?

He married her, and she became the mother of heroes.

Very good. But was anything further heard of Geoffrey and Elfrida, tenants of that rural hut in Sherwood forest ?

Nothing whatever. Whether they ever got married, and reared a numerous progeny ; whether they perished by famine, by outlaws, by wild beasts, or lived on as they were to a good old age cannot now be ascertained. The 'Squire did once institute a vigorous search, but he never could discover the exact spot where they had foregathered, which is scarcely to be wondered at, for Sherwood forest in those days was little better than a vast woody labyrinth.

COLONEL RAINSBOROUGH'S FATAL SURPRISE
AT DONCASTER.

The written history of Yorkshire can, I think, furnish nothing more startling and brave than certain adventures connected with the sieges of Pontefract Castle during the last civil war—nothing more startling and brave. This grim old fortress of Pontefract gave the parliamentary General more trouble than anything besides. True, after a second protracted siege, the garrison was starved into a surrender; but the Castle was afterwards recovered by the Royalists, while the mode of its recovery reads more like a page of romance than, as it really is, a credible piece of history.*

* It may not be uninteresting to refresh our minds with the particulars. Many loyal gentlemen of Yorkshire had formed part of the besieged garrison, while many more had furnished pecuniary aid and troops for the King. These men, now mulcted in heavy fines, retired to their country residences, but were everywhere suspected and annoyed by the conquering Roundheads. The consequence was, they waited only for opportunity to avenge both their private wrongs and the public cause. One man there was named Morrice, who, as a youth, was page at Wentworth Woodhouse, to the Earl of Strafford; but afterwards he entered the army. On some account (perhaps from personal pique) he took his skill and valour where there appeared more chance of promotion, and soon was made Colonel in the parliamentary forces. Colonel Morrice was a man of rare talents, successful in almost every engagement, for his superior abilities were backed by the most indomitable courage. But he was a Libertine, active in sensual indulgence as in military duties—a true type of the roystering cavalier. Now Cromwell and Fairfax and the great body of parliamentary leaders tolerated not this sort of men; they liked God-fearing men, who could conquer their carnal appetites, and seek Divine guidance in all things. Perhaps they discovered also in Colonel Morrice's true political character, no real sympathy with their own purposes and ends; so when the army was remodelled Morrice received much praise for his military abilities and courage, but was left without employment. This man also retired to his private estate, which was situated at Elmsall, only a few miles from Pontefract. There were not wanting many sincere parliamentarians, however, who sympathised with Morrice, and looked upon his dismissal as a severe loss to their cause; amongst the foremost of these was Colonel Cotterel, the new Governor of Pontefract Castle. An intimacy sprung up be-

Pontefract Castle, with its seven towers and enormous walls, occupied, as we know, a rocky eminence where there was no high hill to overlook it: thus it became almost impossible to storm Pontefract Castle. Our present mechanism of war, and engineering skill, doubtless would have done the job; but it could not be managed in that age, although we must bear in mind that parliament employed in these sieges 30lb. and even 50lb balls.

Towards the close of 1648, both the Royalist forces and the fortunes of Pontefract Castle were reduced to a

tween them, which became so close that not only had Morrice free access to the Castle, but was admitted as a confidant by the Governor in all the latter's official plans and purposes: he had also ample means of ingratiating himself with the whole garrison. Morrice was to the Governor as a right eye and a right hand; being, moreover, a very pleasant companion in their hours of relaxation. Morrice affected to bring the Governor notice of secret meetings and Royalist stratagem, giving him information as to who amongst the local gentry were worthy to be trusted; so zealous was he as to form a corps of reserve, which might act in concert with the garrison on any emergency. No man can give advice like Morrice, and no man is more faithful and trusty: so thought the friendly Governor, Cotterel. But he was totally wrong; for all this time Morrice was in treaty with the King, and leading Royalists to regain possession of Pontefract Castle. It appears strange that in those days when every movement of influential men was watched by jealous eyes that this arch-hypocrite's designs were not signally defeated. Although seldom present at those secret Royalist meetings, the knave managed to hold communication with the members by means of a cypher which none but the initiated could understand. It is certain that many of the leading parliamentarians read Morrice's true character, for Cotterel received numerous warnings to beware of his designing guest. These letters do not appear in the least to have shaken the Governor's confidence, being deemed no better than the foolish scruples of jealous friends, or the slanders of envious detractors; indeed, on more than one occasion, Cotterel made them the subject of ridicule to his "friend." Morrice, however, affected to treat the matter seriously, absenting himself from the Castle for nearly a week together, during which time the governor would send pressing invitations to hasten his presence, saying that no language could express how much he valued his society; whereupon the arch-hypocrite would return. And now by bribes and threats he began to gain accomplices amongst the Castle-guard. But at that time the plotting received such a check that it did not appear likely to be renewed, and all through a woman's confidential babbling. In the whole history of the human race was it ever known that a woman could keep a secret? Michael Anne, of Frickley, whose father was then a prisoner in the Castle,

low ebb. Sir Henry Cholmley with 5,000 troops surrounded the Castle on every side ; but he was manifestly unequal to the command, and Fairfax appointed Colonel Rainsborough to supplant him. Sir Henry, like most imbecile men, was jealous of his prerogatives ; he first complained to Parliament, and afterwards refused to make way for a successor, thus causing much dissension in the besieging army, which tended not a little to encourage the garrison. General Fairfax, however, seeing that more resolution was necessary, placed 1,200 foot and two regiments of horse at Rainsborough's disposal, with prompt instructions that he should direct the siege.

was one of Morrice's accomplices. But Michael naturally wished first to get his father out on parole, in which object he succeeded ; Mr. Anne, senr., was informed of the plot, and he made a confidant of one Holgate, who incautiously mentioned it to his wife, and thus the rumour spread until a report thereof reached London. Colonel Overton then ordered Morrice, the two Annes, with several other persons, to be seized and brought up to London for examination. But although the committee of investigation sat often, and had recourse both to threats and bribes, no evidence could be adduced, and the prisoners were liberated to re-organise their plots. With the Castle-governor Morrice, freed from accusation, stood higher than before ; in Cotterel's opinion no man ever was so unjustly maligned as his friend Morrice. Thus it happened that this deep plotter and hypocrite had even greater facilities afforded him in his treacherous designs ; he remained also the idol of the garrison, feeding and feasting the men until he possessed an influence over them superior to the governor. One night in 1648, everything was ready. A number of Parliamentary soldiers stationed in the town were in Morrice's pay as accomplices, three hundred of the Royalist infantry and fifty horse were waiting in the neighbouring woods, ready for an opportunity to enter the Castle ; so the plotter apprized those officers of the Castle favourable to his designs that an attack would be made in a few hours, and bespoke the guard in his interests. An attempt was made to scale the wall. It happened, however, that the aforesaid sentinel got inebriated, and his place had to be supplied by another, who was not cognizant of the plot. The double ladder (prepared at Morrice's house) was fixed, and two men were in the act of mounting, when the sentinel gave an alarm, bringing to the ramparts a number of armed men, who fired upon the assailants, so that the whole party fled, leaving their scaling ladder behind them.

Here occurs what may be termed a *hitch* in the Chronicles. Where was Morrice himself during this bold assault ? "The first on the ladder, and the last to fly," say a dozen narrators, who, parrot-like, repeat the same note. Others say he was not in the enterprize at all, but inside the Castle, privately enter-

Meanwhile Sir Marmaduke Langdale, one of the ablest generals in the Royalist army, is a prisoner in Nottingham Castle. Langdale was ever strenuous in pleading for succour and aid to the distressed fortress of Pontefract. It was Langdale who arrived just in time to save the garrison from a surrender during the first siege of 1644-'5; it was on him that the garrison chiefly relied for information respecting their cause, and to him it looked for advice and assistance in its greatest emergencies. Had the King accepted Langdale's counsel, and concentrated his army further north, the terrible disaster at Naseby would have been averted, Pontefract Castle relieved, while the

taining the governor with his lively discourse. Brother historians, however immaculate from guile, some of you are unconsciously fibbing; the arch-plotter could not, in *propria personæ*, be both with the governor and the assailants. But he was somewhere, and in forming our opinion of the real part he took in this conspiracy we must reason on probabilities. If Morrice was in the Castle, it is strange that he did not arrange matters better about the sentinel, since the success or defeat of the whole plot depended mainly upon him. The regular sentinel got intoxicated, and it admits of a question whether the identical liquor producing this effect was not supplied by Morrice himself. He got drunk, and his place had to be supplied by another. It was, probably, very late before this inebriation disqualified the man for duty, while, to screen the culprit, the tergiversation may not at that precise time have been communicated to the governor; the whole after-arrangement might have fallen upon a subordinate officer. Or, we may take this view of the matter—a comrade conscious of some *laches* on the part of the sentinel, finds him drunk and asleep; he takes his place for the night without any regular appointment, and thus frustrates the plot. But the governor and his guest, roused by the alarm, would naturally rush to the watch-tower; and it is said that Morrice, after the marauders were at a safe distance, stimulated the fire against them. Those who maintain that Morrice was leading the scalers, and not in the castle, inform us that the whole party fled into the woods, sending out scouts to learn if they were tracked, but finding nothing of the kind their leader retired to his house, and next day returned to the Castle. Be this as it may, the governor does not appear to cherish the least suspicion against his "friend." His "friend" examined the rope-ladder with the greatest curiosity, marvelling at the audacity of such an attempt, suggesting to the governor certain precautionary measures, the chief of which was to strengthen the garrison by bringing in all the parliamentary soldiers who were quartered in the town. It was an unfortunate moment for the Parliament when Cotterel agreed to this expedient. It necessitated the ingress of extra beds and baggage; therefore the governor issued a warrant to

Royalist army, continually reinforced by the loyal Scots, might have stemmed the stream of faction. It was not so; the advice of Prince Rupert prevailed, and though the Royalists fought well at Naseby, while Sir Marmaduke Langdale did prodigies of valour at the battle of Preston, the fortunes of Charles were under an eclipse.

And now, in all the country, there were only this fortress of Pontefract, and Scarborough Castle left to the king. Still, although the Royalists' prospects were daily getting gloomier, this garrison kept up its courage. When the besiegers first heard of the victory at Naseby the commanding officer despatched a herald to the Castle with a report, offering even then, if the garrison

bring these things in. Morrice knew that the order was given; guessed also when the staff was likely to arrive, and fulminated another plot. One morning about six o'clock, Captain Wm. Paulden, and nine or ten soldiers, disguised, some as labourers, others as policemen, arrived with beds, &c., and enquired for Major Morrice. The guard, who was an accomplice in the plot, went to the governor (he was just returning to rest after his night-watch,) with information that the beds had arrived, and that Major Morrice was expected in half an hour. The governor gave orders to admit the constables with the beds, and dictated a message to Morrice, telling the messenger to conduct the Major here as soon as he arrived. Poor deluded governor! he little thought what enemies were already waiting at the gate. The guard brought the keys, the massive doors were thrown open, and Morrice (who had just arrived), Captain Paulden, sham policemen and sham labourers, entered, and threw down the beds. Morrice threw down a crown-piece, bidding the guard fetch in ale. Capital tactician! Two or three soldiers went for the ale, and when they were gone the draw-bridge was raised, the sham policemen drew their weapons, and Morrice, knowing his men, addressed the the residue of the guard—"You are mine, you are mine, and you are mine," singling out eight of the men. To be brief, the captain of the guard found he was in a minority, when all the soldiers who were not in their beds, and not in the plotter's confidence, were cast into a dungeon. Captain Paulden, with two or three others, then proceeded to the governor's room, who was speedily awakened and armed, but after waging an unequal contest, he was overpowered and made prisoner; thus in less than an hour the whole garrison was subdued, and the Royalists had their own again.

It was an infamous proceeding, truly! O, yes, we know the old proverb—"Everything is fair in love and war," but, in our day, it would require a large amount of sophistry to exalt this Morrice into a hero.

would capitulate to treat the soldiers leniently. The governor, however, did not believe the account about Naseby, and sent an answer to the besiegers that he valued neither their power nor their mercy: but it afterwards transpired that the most falsely favourable accounts were sent to the besieged by their friends, hoping by this means to encourage the governor to hold out. That five thousand, or even fifty thousands troops would be able to storm the fortress in fifty years, however energetic might be their commander, admits of a doubt: there was no way but starving the garrison into submission. Here it is worthy of note how a mere handful of men did often drive back large columns of the besiegers, and bring in supplies for the Castle; but "desperate men make desperate deeds."

And now news came that Rainsborough with a large force was coming to strengthen the besiegers, while to crown their misfortunes trust-worthy information arrived that Sir Marmaduke Langdale was a prisoner, having been detected in disguise at an inn near Nottingham, and taken. It was soon intimated to the garrison of Pontefract that if it did not surrender its old general would be brought and executed before the walls: so a plan was devised to gain possession of Colonel Rainsborough, that he might either be exchanged for Langdale, or suffer corresponding vengeance.

And now let us come closer to the real question on the paper (the death of Rainsborough); state the case according to local historians, and furnish some criticism thereupon.

The plot or design is said to have originated in the fertile brain of that Captain William Paulden, who was Morrice's principal accomplice in retaking the castle. But we must remember that Morrice was, at that time, the real commander of the garrison, and it is difficult to conclude otherwise than that this arch-plotter had something to do with the project. Drake in his *Eboracum* says that Rainsborough received his death-blow from the hand of Morrice; but this evidently is a mistake, since all the evidence goes to prove that Morrice was not present in the expedition.

1648.—One dark night in October—some say it was the 29th, and some say it was the 31st. Well, the

difference of a day or two in the chronology is not of much consequence so long as the main circumstances are true—at midnight, in October, Captain William Paulden, Captain Thomas Paulden, Lieutenant Austwick, Cornet Blackburn, and nineteen others prepared to leave the Castle. Whitelock, Dr. Miller, &c., state that the company numbered forty, but Captain Thomas Paulden, who was in the expedition, and wrote an account of the whole circumstances says, it only numbered twenty-three, and, surely, he ought to know best. It is natural to suppose they would escape from that side of the Castle, and follow such a route as was least occupied by the besiegers. It was so; still, even here, the Royalists had to pass between two of the enemy's horseguards; but, the night being dark, and the guards, it may be, not very watchful, they passed the besiegers' lines in safety, and soon struck out into the more retired by-paths, so that if even surprised and pursued they might betake them to the adjacent woods. Instead of coming to Doncaster by the highway, they took a circuitous route to Mexborough, thus evading the parliamentary scouts.

And here a question of some interest arises, namely, whether they travelled in disguise, or accoutered as Royalist soldiers. At the first glance one is tempted to infer that they did travel as King's troopers, or why all this care to elude the enemy's scouts? Arriving at Mexborough, it is said, they sent a spy on to Doncaster, in order to discover whether or not the parliamentary officers had notice of their escape from the Castle, or were strengthening their guard: he was to meet them on his return at Conisborough* under cover of night. The spy was evidently directed to some trusty Royalist in Doncaster for information. The latter had seen or heard nothing which should cause disquietude to the skirmishers, and if the town remained quiet this friend engaged to send a messenger some distance on the road by sun-rise, with a Bible in his hand. In those days there was great outward show of godliness, and the messenger knew that if even he was met on the road at that untimely hour by the parliamentary scouts, they would suspect no evil, but esteem him a pious Round-head, when they saw that he had a Bible in his hand.

So it was, the man with the Bible arrived near Conisborough* by break of day, whereupon the whole band crossed the Don by a ford a little below the Castle-mound, and proceeded *via* Sprotborough to Doncaster. Why their leader choose this route in preference to the open road leading through St. Sepulchre-gate does not at first sight appear obvious, because here they would come direct upon a strong guard, placed near where the House of Grey Friars once stood, besides having to encounter the guard on the bridge. Captain William Paulden knew well that the whole success of their undertaking must depend upon a sudden dash, or rather series of surprisals. Had he taken the direct route from Pontefract, the scouts would probably have given notice of their approach, thus preparing the guard for an attack; the same result would have happened by the high road leading to St. Sepulchre-gate: for secrecy, therefore, he choose the Low Common in the valley of the Don where danger or attack was not suspected.

The account runs that Paulden divided his men into four parties, so that they might work in concert without exciting any marked attention in the town. Twelve of them, in two separate companies, were to cajole, or, if need be, rout the mainguard and the guard on the bridge; four were directed to Colonel Rainsborough's lodgings, while the remainder six, with Captain Wm. Paulden at their head, were to beat about the streets in

* In what condition was Conisborough Castle at the period referred to? Was it capable of defence, or, even then, a heap of ruins? I think it must have been at this time totally dismantled. But when was it overthrown? We cannot tell. The neighbouring fortress of Tickhill is closely associated with the history of the times, but no record have we respecting Conisborough Castle in connection with this struggle: it must have been dismantled at an earlier period, and so easily destroyed as not to have left a tangible record in history of its fall. Strong as Conisborough Castle assuredly was, impregnable as it might be under the early system of warfare, its situation would ultimately ensure its destruction, since the first effective discharge of heavy artillery from the neighbouring heights would inevitably reduce it. Any one who gazes for a moment at the site of this fortress, with its closely adjacent cliffs towering to a superior height, will easily be convinced of this fact.

order to prevent any muster of the soldiers from alarm or other causes.*

There is an old adage that "fortune favours the brave," and truly the success which attended these bold cavaliers was marvellous, even magical. One dash and the barricades are stormed, the soldiers throw down their arms and escape for their lives. The guard upon the bridge fling their weapons into the water and fly. The main-guard is surprised by our heroes getting between the soldiers and their arms. The soldiers, even if they were willing, could not fight without their weapons; so they also fly. What flying there is!

And all achieved
By twelve brave men
After the break of day.

* I have looked carefully through the hackneyed narratives called "Local History," and yet find it difficult to reconcile many circumstances therein stated with probability. For instance, long after midnight on the 31st of October (that period of dark nights), a secret messenger wanders suspiciously towards Conisborough. But why take a Bible in his hand since he could not read on the journey? It may be answered that a hypocritical odour of sanctity showed a zest for the sacred records, proved that the Bible was this man's constant companion, ready in hand for perusal whenever and wheresoever an opportunity presented itself. Very good; but then this travelling Bible was to be a signal to the Pontefract troopers that all was right, which could be no signal to any one in the dark. Perhaps it would be moonlight, however, and in a clear moonlight night people might easily distinguish, even at a distance, such a big book as was the printed Bible of that age. It might be so. What time would the bold adventurers arrive at Doncaster? If, as before stated, the royalist messenger met them near Conisborough at daybreak, it must have been quite daylight before Captain Paulden reached the first barricades. But this idea receives contradiction in the main circumstances of the case. Daylight would have rendered the whole strategem unoperative; the marauders would have been seen, and their feebleness estimated before they had opportunity of making an attack. Miller, in his history of Doncaster, states that only three of the company entered the town, going in by St. Sepulchre-gate, pretending to have despatches from Oliver Cromwell to the Commander. According to his meagre and unsatisfactory account, the pretended messengers were ordered to the Colonel's bedroom, when, instead of a letter the three men presented arms, commanding Rainsborough to surrender, but as he refused to surrender they killed him; afterwards they had the good fortune to rejoin their companions, when all escaped safely to Pontefract. That three men, single-handed, should attempt to carry off Colonel Rainsborough a prisoner in the midst of his troops is a project almost exceeding belief.

The little band of four now hasten to Colonel Rainsborough's lodgings, situate in the Market-place, near to where a butter-cross had recently been erected. They tell the sentry that they have despatches from Cromwell, and must deliver them into the Colonel's hand. The commander is informed of their mission, and although not yet risen from his bed orders in the messengers. But only two enter, escorted by a lieutenant. Of the remainder one stays in the Court-yard to hold the horses; the other makes his way to the guard (but where situate I cannot clearly make out), telling the soldiers he waits for his officer who has gone with despatches to the Colonel: he pays for some drink and dissipates suspicion.

While Colonel Rainsborough is opening the mock despatch, which proves to be only a packet of blank paper, the two royalists possess themselves of his arms (the lieutenant, it would appear, had no weapon), then, guarding the doorway, they acquaint the Colonel that he is their prisoner, order him to dress quickly and accompany them, promising good treatment in case of obedience. The two Royalists escorted the Roundheads to where the horses were in waiting, but Colonel Rainsborough seeing only three men where he expected to find an army, naturally refused to be carried off. A struggle ensued, during which one of the Royalists dropped his sword and pistol. The lieutenant seized the pistol and was in the act of discharging it when he was run through the body by one of the Royalists. Rainsborough, sword in hand, attempted to fight his way into the street, but was soon overpowered and slain. The three Royalists now found it advisable to rejoin their companions and retreat before the guard, horrified at the sight of this bloody spectacle, could assemble the troops. The startling news soon spread, however, and if we may credit some "local historians" it seems as if this sudden and sanguinary deed had thrown the whole vicinity into confusion, as if the Roundhead soldiers concluded that a hostile army was secretly springing up in their midst, for they everywhere fled in disorder, while the reorganized band of Royalists, made full forty prisoners, and re-entered Pontefract Castle without sustaining the slightest loss.

CALVERLEY HALL.

It may be superstition, and it may be foolishness, but I have a kindly regard for old things. There is a certain companionship in that rude, carved chair, in which some antient grandame sat—sat bolt up-right, with head-dress like a pyramid, rising above the tall chair-back. Even those tiny bits of china have a language of their own. From these some venerable ancestors quaffed strong bohea, and talked village scandal while Queen Anne was curing scrofula with her royal touch, and the victorious Marlborough was fighting and plotting treason. We may look at the toyish things until some picture of the mind begets a smile. In imagination we watch the gruff, but honest Dr. Johnson gulping his thirteenth dish, and wonder, not at the quantity imbibed but at the incongruity of such a little vehicle to such a burley nose and capacious mouth. Still I always think that the best reflection of by-gone ages is given us in old halls, baronial castles, manor-houses, and even cottages where remarkable men have dwelt. Throughout this great county there are quaint, rickety old buildings, which are now preserved, as they ought, with scrupulous care, because they are associated with the county history. And we love to visit these places, because the very walls and timbers seem to stamp the old scenes and actors with an air of reality. For my part it is impossible to write with interest about any place which I have never seen, and so before telling an old story of a fearful tragedy, the place where the act transpired must needs be visited.

On arriving at Leeds I asked a friend if he knew Calverley Hall. Yes, he knew it. Well, would he accompany me as guide? Certainly, he would. Now, as a rule, I am not fond of companions when out on a mission of this kind, since they invariably distract one's attention by their good humoured twaddle; but as my friend knew Calverley Hall, and the district round about, he might, possibly, occupy the position of a talking gazette: I was therefore very thankful for his assistance.

The hills which rise up from Airedale, on each side of the river, are studded with "clothing villages," uniform stone cottages cluster round plain stone factories in the proportion of about forty houses to a mill, whence, on all hands, issue the whirring sounds of the spinning-jenny or mule, the clicking of hand-loom, and strong aromatic smells. Midway between Leeds and Bradford, on the very top of the ridge, stands the village of Calverley, whither we are bound.

Alighting at the railway station, we pursued our course through green fields until we reached a fine modern house, standing by itself in ornamental grounds, at a respectable distance from all meaner dwellings: this, my companion said, was Calverley Hall. But it was certainly not the Calverley Hall I had come to see—not so antient a building by at least three centuries. My friend knew no other Calverley Hall, and I began to entertain a doubt whether every relic of the old place was not obliterated. Just at this moment two young men passed us, and, on being questioned, said this was Calverley House, but that the old hall stood near to a public-house, in the very centre of the village. Of course we went to the Calverley Arms, certain of getting there a little refreshment, hopeful also of gaining some information. After bringing in the "shandy-gaff" [ale and ginger beer mixed] the landlord was ready and willing to give us any local information. But he must sit to it, for so fat was he that it seemed a piece of severe physical labour to talk, while, at every respiration, was heard a kind of whistling sound—quite a shrill whistle, and though the burly breast panted, there was an air of manifold importance in his grave, fatherly face. He had lived here above forty years, but could not remember any of the old family: and then he proceeded slowly to give us a disconnected account in which the names of Lady Blackett, the Thornhills, Standfields, &c., received due homage.

But I was impatient to see the old Hall. A young man, who appeared to be son to the landlord, pointed us to a narrow "ginnel," saying that when we got to the end of that we must inquire for John Marshall, who occupied the chief part of the Hall.

Truly, without such minute directions a stranger might overlook the old edifice altogether, for it is so surrounded with cottages, and being itself divided into three or four tenements, and used partly for cloth manufacture, the associations are mean and commonplace. On a closer inspection, the thick irregular stone-walls, the quaint gables, and the square, heavy mulioned windows are acknowledged evidences of antiquity. A flight of stone steps outside lead to the central hall, and here through the open door we could see the end of a spinning-jenny, and large skeps of weft. And this is Calverley Hall! Mean and insignificant in comparison with modern mansions, humble in comparison with the lordly castellated mansions of its own age, still not without pretensions to comfort at a period when the straggling landed proprietors had little refinement and plenty of leisure. Here, and in some earlier building, occupying probably the same site, the Calverley family had lived for upwards of five centuries. But who were the Calverleys, and how did they gain possession of these estates? A Lacy, as we know, received this great slice of Yorkshire from the Conqueror, and the first grantee from him appears to be one Alphonsus Gospatricii. Landrino, daughter of this man, married a household steward of the Empress Maud, and evidently resided here, for about the middle of the twelfth century a son was born to them, who was known as Walter de Calverley, and was probably the first who assumed that name.

It were surprising if a family could live for five hundred years, and more, on the old ancestral soil without leaving to succeeding ages some memento of its history. Yet there are such families of whom it may be said, we know their genealogy and possessions but nothing more. The Calverleys have preserved their name from oblivion by one of the most dreadful tragedies which Yorkshire can record.

An account of the whole circumstances, and something more, from the pen of a contemporary Grub-street writer has been preserved. The narrative, although exceedingly prolix, abounding in wordy declamation, contains many passages of great natural pathos, and is altogether curious considered as a waif of that age when

Shakspeare and the lesser dramatists were moulding our crude English literature :—

MAISTER CAVERLEY'S UNNATURALL AND BLOUDIE
MURTHUR COMMITTED UPON HIS WIFE AND PRAC-
TICED UPON HIS CHILDREN.

There hath happened of late, within the countye of York, not farre from Wakefield, a murther, of so de testable sort, that were it not that it deserves record for example's sake, humanity could wish it rather utterly forgot, than any Christian heart should tremble with the remembrance of it.

Within this county was bread a gentleman, one Mr. Caverley, of Caverley, a man whose parents were such as left him seven or eight hundred pounds a year to enrich his hopes, cherish his content, and make him fortunate. His father dying before he had reacht the years of privilege, during his nonage he was ward to a most noble and worthy gentleman in this land, in all which time his course of life did promise so much good, that there was a commendable gravity appeared even in his youth. He being of this hope, virtuous in his life and worthy by his birth, was sought unto by many gallant gentlemen to unite his fortune unto their families, by matching himself to one and the chief of their daughters. Among which number it happened that being once invited (a welcome guest) to an antient gentleman of chiefe note in his country, he came, where, in short time there was such interchange of affection by two paire of eyes to one pair of hearts, that this gentleman's best beloved daughter was, by private assurance, made Maister Caverley's best beloved wife; nor could it be kept so close between this pair of lovers (for love will discover itself by loving looks) but it came to the father's knowledge, who, with natural joy, was contented with the contract, yet, in regard to Maister Caverley's years, could not discharge the charge his honourable guardian had over him. The father thought it meet (though the lovers could have wished it otherwise) to lengthen their desired haste, till time should furnish a fit house to solemnise their happy wedlocke.

Mr. Caverley having spent some time there in decent recreation, much abroad, but more at home with his new mistress, at last he bethought himself that his long stay made him looked for in London; and having published his intended departure, the fathert hought it convenient, though the vertuous gentlewoman danced a "loth to depart" upon his contracted lips.

Maister Caverley came to London, where, concealing his intended contract from his honourable guardian, or forgetting his promise and publicke vows, or boath, I know not, but time, mother of alterations, had not fanned over many daies but he had made a new bargain, knit a new marriage knot and was husband by all matrimonial rites, to a courteous gentlewoman, and niece, by marriage, to that honourable personage to whom he was ward. Rumour, with his thousand tongues, and ten thousand feet, was not long before he had delivered his detested message to his first maisteriss's ears, who, looking for more loving commendations, and having heard but part of that as truly as it was, the winde of her sighs so raised up the tide of her tears, that she clipped the report, ere it could be told out, into many pieces. And as she would still faine have asked this question, "is it so indeed" she was faine to make up the distracted sillables of her words with the letters of her eyes.

This gentlewoman, Maister Caverley's wife, (if vows may make a wife) tooke with an inward consideration so to heart this unjust wrong, that, exercising her houres only in continuall sorrow, she brought herself to a consumption, who so plaid the insulting tyrent over her unblemished beautie, that the civile contention dwelt in her face of white and redde, was lurried to a death-like paleness, and all her artires wherein the spirit of life dooth runne, like giddy subjects in the empire of her body, greedie of innovation, took such ungentle parte with this forreigne userper, that where health before was her peaceable soveraigne, now distracted sickness and feeble weakness were her untimely conquerors. Yet under this yoke of grief she so patiently endured, that though she had great reason, for a foundation whereon she might have built arguments to have curst his proceedings, and where others would have contrasted sillables both of reproach and reproofe against him, she only married these letters together. "I entreat of God to grant both prosperous health and fruitful wealth to him and his, though I am sicke for his sake.

But to Maister Caverley, who having finished this wrong to this gentlewoman, and begunne to marke distresse to her that he married (as to soon it appeared) for though the former conquered by the gentleness of her nature, forgave his faults, yet revenge being in God's hand, thus it fell. This gentleman had not lived many

months with his wife but was so altered in disposition from that which he was, and so short from the perfection which he had, as a body dying is of a life flourishing; and as before he only studied the relish of virtue and her effects, his actions did now only practice the unprofitable fruites of vice and her fruits. For though he was a man of so good a renew as before, he continued his expense in such unfeeling riots that he was forced to mortgage his land, run into great debts, entangle his friends by being bound for him, and in time so weakened his estate, that having not wherewithall to carry that port which before he did, he grew into a discontent that so swaid in him he would sit sullenly, walke melancholy, he thinking with such steddly looks nailed to the ground, seem astonisht; when his wife would come to desire the cause of his sadnesse, and entreat to be unwilling partner in his sorrows, for "*Consortium rerum omnium internam facit amicitiam*," he would either sit still without giving her any answer, or rising uppe depart from her with these words, "a plague upon thee, thou art the cause of my sadnesse." The gentlewoman, which no doubt this report is true of her, never so much as in thought offended him, and having been sundrie times curst without a cause, once came unto him, and making her tears parley with her words, she thus entreated him, "Sir Maister Caverley, I beseech you by the mutual league of love that is betwixt us, by the vows we made together both before and after our marriage, and by that God that registers our thoughts, tell me what I have done, the remembrance of which should affect you, or what I might do that I might content you, as you desire that the three lovely boys that you have been father to should grow up and make your nature live in the country, acquaint me with your griefs, and what a wife can show to manifest her love to her husband shall be done by me."

"Maister Caverley, fixing himself with a steddie eie upon her, at last delivered this—"I want money and thou must help me."

"O, Maister Caverley," quoth she, "though God and yourself know that I am no cause of your want, yet what I have to supply you with either in money, or jewels, or rings, I pray you take; and I beseech you as you are a gentleman, and by the love you should bear to your children, though you care not for me, looke back a little into your estate, and restraints this great flood of your expense before your house be utterly overthrowen."

You must know, Sir, that your land is mortgaged already, yourself otherwise greatly in debt, some friends that are bound for you likely to be undone ;" but as she would have gone forward he cut her short with these words, "base strumpet (whom though I married I never loved) shall my pleasure be confined to your will? if you and your bastards be in whant, either beg or retire to your friends, my humour shall have the ancient scope. The rings and jewels will I sell, and as voluntarie spend them as when I was in the best of my estate."

The good gentlewoman's eyes being drawn full of tears, with these wordes, made him no other answer but this, "Sir, your will be done." But he fled on in this vehemence of bloud, "I protest by heaven that I will ever hereafter loathe thee till thou give thy consent that thy dowrie shall be sold to maintaine my pleasure, and leave thyself and children destitute of maintinance." "Sir," answered she, "in all this I will be a wife ; what in all this the law will allow me to doe, you shall command." "See thou dost it," quoth he, "for no longer than I am full of money shalt thou take from me a taste of kindness." Mrs. Caverley going forward with this intent to sell away her dowrie, was sent up to London by that honourable friend whose niece she was, and whose ward she had been, who had heard of her husband's prodegall course, at her coming up began to question her about his estate, and whether he bore him as a husband should do in famelear love to her. The gentlewoman, she knew how desperate his estate was, and her tongue too well could have told her of his unkindness, she answered both thus, "for my husband's estate I make no doubt but it is in the same height his father left it him ; but for our love to one and other I am assured, and I praise heaven for it, that we love like Abraham and Sarah, he loving me and I obedient to him.

"Howsoever," answered this honourable friend, "your words are an ornament which a good wife should have, and you seek to shadow the blemishes his actions have cast upon his life, let this suffice you, I know of his prodegall course, I know how his land is all or most part of it mortgaged, himself in debt to many. Yet censuring these infirmities to proceed from no other cause but from the rash heart of youth, will in time no doubt be suppress by experiance, and for that I believe your words to be true, and am glad to hear of his kindness toward you, I will take such order for him as he shall

continue Maister Caverley in the same degree or better than ere his ancestors were in Yorkshire; and at your return so certifie to him withall that he hasten up to the court, nor let the fear of his creditors abridge his coming up, for I will protect him both from them and also provide some place at court for him, wherein he shall find I am his honourable kinsman."

The good gentlewoman was struck with joy at this comfortable promise that she was scarce able to speak out her delightful thanks; and thinking her husband would be no doubt satisfied with this preferment, hoping that kindness would be contracted between them again, assuring herself that there would now be no need to make sale of her dowrie,) for that was also a part of the business); having taken leave of her honorable kinsman, she returned towards Caverley.

During this her absence Maister Caverley maintained his accustomed habits, and indeed grew worse; for mischief is of that nature that it cannot stand but by strengthening one will with another, and so multiplied in itself untill it comes to the highest, and then falls with its own weight. So Maister Caverley being given to excesse, rioting, as diceing, drinking, revelling, and it is feared other things, and it is thought fed one will with another in such continuall use that his bodie was not in temper with the exercise of sinne; who knows not as *Sine Cerere et Baccho friget Venus*: so without money pleasure shall hardly be maintained. And this gentleman having made wreck of his estate, and finding himself not to maintain his pleasure when his desire was as great as before, (for pleasure being once delightfull to the memorie is as hard to be resisted as madness), first fell in a hatred with his wife, and in this her absence to such a loathing of his children; and in what company soever he happened to be he could not contain his rage, but would openly proclaim his wife was a strumpet, his children were bastards; and although their marriage was made by honourable persons, herself nobly descended, from the first hour he embraced her to that very minute he did loathe her. Some would mildly perswade him from this friensie, others would courteously reprove him, saying it was not fitte, and all whose modestie thought it unmeete to meddle between man and wife, knowing her vertuous life, did utterly condemn him. But he continuing this publication in all places where he came; at one, among the number, there happened to be a gentleman who having known his

wife from her cradle, and seeing him so wilde in his abuce, prepared himself confidently to contradict him, and having begunne his speech of chastisement, the other, not enduring to be detected, both soone inflamed fell to quarrellous termes, and in such haste that Maister Caverley did not spare to say that he might be his wife's friend for ought he knew, nay, there was great presumption for it, since hee should be so easily stirred up to take his wife's part. The gentleman not enduring to hear her reputation, but especially his own to be touched, so answered Maister Caverley, and again Maister Caverley him, that they agreed to purge themselves in the field; both met, and after some thrustes, channged betweene them, Maister Caverley was hurt, yet would not give over, so that afterward he became at the gentleman's mercie, but he of that humane condition not to desire his life, nor so much blood as was, had he not been urged, bad him rise, and left him with these words, "Maister Caverley, you are a gentleman of an antient house, much good has been expected from you, deceive not men's hopes, you have a virtuous wife, be kind to her, I forget my own wrong, and continue your friend." But Maister Caverley, unsatisfied with this, his heart flew to his mouth as if it would have leapt out after him for revenge, yet knowing he could get little by following him but hurts such as he had already, prepared to turn his wrath another way. Then looking upon his wounds and seeing them bleed, said to himself, "Strumpet, thou art the cause that I bleed now, but I will be the cause that thou shalt bleed after; so taking his horse rode presently home, where, before his wounds were thoroughly cured, his wife was come from London, and the first greeting given by her husband was, "What, hast thou brought me the money? is the land sold?" She answered, "Sir, I have made a journey that shall redound both to your comfort and mine." So acquainting him with the presidencie which was his promised preferment by her kinsman, and expecting a loving acceptance, the first thankes he gave her was by a spurne; and looking upon her as if his eyes would have shot fire into her face, "Have you beene to London to make complaint of me, you strumpet," quoth he, "that the greatness of your friends might oversway the weakness of my estate? And I that have lived in that ranke of will that I have done, that freedom of pleasure shall forsake me now? Shall I being a Calverley of

Calverley, stoop my thoughts so low to attend on the countenance of your alliance, to order my thoughts by their direction, and neither doe nor undo anything but what they list, which if I refuse to doe your complaints have so wrought with them, and you have so possessed them of my estate, they will enforce me forsooth for your good and the good of my children ; was this your trick to save your dowrie ? that which I swore you should sell, was this your going to London ?”

The good gentlewoman being almost blown to death with this vehemence of his wrath, fell at his feet, and desired him to heare her, when poor soule, she was so full of grief she had not the power to speak ; yet having eased the way with a few of sorrow's drops, she began to plead this fine excuse with him, that like one that had lost his senses, had scarce patience to hear her ; “ Sir,” said she, “ heaven knows that the words I speak have no fashion of untruth ; my friends are truly possessed that your lands are morgaged ; they know to whom and for what, but not by me, I beseech you believe ; and for any difference betwixt yourself and me, which I doubt not would offend more than the morgaging of your land, I protest yet hath no reason to suspect ; if you think I have published anything to him with desire to keep the sale of my dowrie from you, either for my good or my children's, though it fits I should have a motherly care of them, you being my husband, pass it away from you how you please, spend it how you will, so I may enjoy welcome lookes and kind wordes from you ; and when all which you call yours is gone, ere you and yours shall want I will worke for your maintenance, neither of which extremities, Sir, need, if you please, if you will but accept preferment in England's court, being offered to you gratis, which many men would purchase with cost and cannot compasse.” At which words, though mildly uttered, and on her humble knees, he was so without cause enraged that had not one of his men come up in the instant and told him there was a gentleman from one of the universities staid to speak with him he had offered her some violence.

Maister Caverley went down to talk with this gentleman, leaving his wife stuffed with grief up to the eye-lids, and she, good soule, having ceased her grief by a sigh or two, laid her down upon her bed, where in careful slumbers we will leave her, and attend the conference betwixt Maister Caverley and this gentleman. Maister Caverley

had at this present a second brother who was of good standing in the university, who upon some extremity Maister Caverley was in, for so he would plead himself to be his friend, when he would have them bound for him, had passed his bond with his brother for a thousand pounds; this bond was forfeited, suied, and this young gentleman being reputed of staid government, the execution was served upon him, and he is at this instant prisoner for his brother's debt. About this business came this gentleman to Maister Caverley, who being master of the college wherein his brother had his instruction, and having ever noted his forward will in the exercise of vertue, in pittie unto his estate, being moved thereunto by the young student, came purposely thither, who without long circumstance told Maister Caverley the cause of his coming was to stirre up his conscience to have regard to his brother for he heard he was carelesse, and indeed dwelt so sharply and forcibly in laying open to him what scandal the world would throw upon him, what judgment from God should fall upon him for suffering his brother to spend the glory of his youth, which is the time young men of hope seek preferment, in prison by his means, did so harrowe up his soule by his invincible arguments that in that minute he made him look back into the error of his life, which scarce in his life he had done till this instant.

The gentleman having spoke his mind asked him what he meant to do with his brother, for he now waited his answer. Maister Caverley made him this mild reply, "Sir, I thanke you both for your pains and good instruction to me in my brother's behalfe, and I must confess I have done him wrong." So calling for a cup of beere he drank to him and bade him welcome; "now Sir, quoth Maister Caverley, if you please to walke downe and see the grounds about my house one of my men shall go along with you, at your return I will give sufficient answer that my brother by you shall be satisfied, and be a prisoner but a few hours."

The gentleman thanked him, and told him that in performing that naturall office, he should both gratifie God, satisfie the world, and he himself should account his paines profitable.

This stranger is gone to walk with one of Maister Caverley's men to overview his ground, and Maister Caverley retires himself into a gallery, where being alone he fell into a deep consideration of his state, how his prodigall course of life had wronged his brother, abused

his wife, and undone his children, and the misery he should leave his children in. Then he saw what an unnatural part it was his brother should lie in prison for his debt and he not able to deliver him. Then he saw that his wife being nobly descended, unless her own friends took pity upon her, should with his children be driven to beg remorse of the world which is all composed of flint. Then he saw the extirpation of his family, the ruin of his house, which hundreds of years had been gentlemen of the best reputation in Yorkshire, and every one of these out of their severall objects did create severall distraction in him. Some time he would tear his hair, and by and by tears would rush into his eyes, strait break out into the exclamation, "Oh I am the most wretched man that ever was born of a woman! Oh, that I had been slayne in my mother's wombe, and my mother had been my sepulchre! I have begot my children to be nothing but wretchedness, made a wife to eat her bread in bitterness, and a brother to be full of care.

As he was thus tormented by the remembrance of his own folly, his eldest son, being a child of about four years old, came into the gallery to scourge his toppe, and seeing his father stand in a study, came prettily uppe to him, saying "How do you do, father?" which lovely look and gentle question of the child, raised again the remembrance of the distresse he should leave him in. And as the sea being hurled into furious billows by the raging of the winds, hides both heaven and earth from the eyes of man, so he, being overwhelmed by the violence of his passion, all naturall love was forgotten in his remembrance, caught his child up by his neck, and striking at him with his dagger, the child lent him such a looke that would have driven a hand seven yeare practice to murder, to an ague: yet hee oh, would it had never been done, it might never have been told: though his arm seemed twice to remember him of the monstrousness of the fact, he strook the lovely infant into the head, and holding the bleeding child at armes length, that it might not sprinkle his clothes, which had stained his hart and honor, he so carried it into a neare chamber, where his wife lay asleep upon a bed, and the maide was dressing another child by the fire, (here is to be noted his other child was at nurse); but the woman seeing him come in that cruell sort—his child in one hand, his reeking dagger in the other, the child bleeding, he staring—started from the

fire, and, with the child in her armes, cried out, but he, letting go the boy he had wounded, caught the other violently out of her armes, and this chamber doore being at the toppe of a very high pair of stairs, carried her forth by maine strength, and threw the poor woman down to the bottom, who in tender pittie, by president of the one would have preserved the other.

The child that was wounded was all this while crying in the chamber, and with this woefull noise wakened his woefull mother who seeing one child bleeding, the other lying on the ground (while he strove to throw the maide down stairs), she caught up the youngest, and going to take the elder, which was going toward the the door, her husband coming back met her, and came to struggle with her for the child, which she sought to preserve with words, tears, and whatever a mother could doe, from so tragical an end. And when he saw he could not get it from her, he, most remorseless stabbed at it three or four times, all which she saved the child from, by taking it to herself ; and having a pair of whalebone boodice on, it pleased God his dagger so glanced on them, that she had got but one wound on her shoulder. But he, more crewel by this resistance, caught hold of the child in his mother's armes, and stabs it in the heart, and after giving his wife two or three *mortall* wounds she fell backward, and the child dead at her feet.

The maide that was thrown downe stairs, with the greatness of the fall, the staires being high, lay in a swoond at the bottome ; the noise of this brought the servants to help the maide, thinking that she had fell by mischance (not knowing that which was most tyrannous) did their best to comfort her beneath, while the father and mother were striving, one to preserve the infant, the other to kill it.

The child that was first wounded sought to get to the doore, and having recovered the top of the staires (by expense of blood, and the greatness of the wound), having nobody to comfort it, fell alsoe downe the staires ; and the armes of the servants helping the maide at the staires foote, were faine to let her go to receive him. Some caught at the dead infant, some helped the maide ; all amazed at this tragick alteration, knew not what to think ; yet one of the men more hardy than the rest ranne up stairs and met his maister in the chamber, where he saw his mistreess lie on the ground, and her dead infant at her feete, and saying to him, "O Sir,

what have you done?" "That which I repent not of knaive," answered he; and having his dagger still in his hand, came to stab at him, but the fellow seeking to defend himself, as alsoe to attack his maister, they both fell a struggling. Maister Caverley, which was known before, was a man of weak constitution, was in the strife too hard for the fellow, who was reputed of a very able body, and in the wrestling together did so tear him with the roweles of his spurs, both in the face and legs, that there he left him, not being able to follow him.

Maister Caverley, went downe staires, and presently took toward the stable; by the way he met the gentleman (who had told him about his brother being in prison) who before was walking in his grounds, who, wondering to see him in such a heat, asked, "What aile you, Sir?" he answered, "No great matter; but Sir, I will resolve you within, where I have taken order for my brother's business." Soe the gentleman walked in, and Maister Caverley hasted to the stable, where finding a gelding ready saddled, backed him, and fled away presently. The gentleman coming in was entertained with outeries and shriekes, the mother for the children, (for by this time she was almost recovered,) the men-servants at their doleful mischance, and all lamenting that a father should be soa unnaturall. The gentleman doubting that which was of Maister Caverley's escape, left all the house, making elegies of sorrow, and betook himself to his pursuit, and having forthwith raised the town, and heard which way he went, followed him with the quickest haste. Maister Caverley being well horst, spurred on as fast as they, not earnest to escape, but thirsty for more blood; for having an infant, half a year old, at nurse some twelve miles off, he, pricked by his preposterous fate, had a desire to root out all his generation, and only intent to murder it, was careless what became of himself. He rode hard for an act of sin, and they for an act of justice. But God that ordereth the losse of a realme, hath then a care for his reasonable creatures; and though Cain was suffered to kill his brother Abel, God bound him not to destroy him. So far Maister Caverley, as God permitted the sin to blush at his unnaturall acts, yet he suffered him not to escape without his revenge, for when he was at the townes end, within a bow shot where the child sucked that he came to murther, and his hart had made sharp his knife to cut his own infant's throat, (Oh, God, how just thou art,) his horse that flew with him from his former tragedie, as appointed by God, to tie him from any more

guilt, and to preserve his infant's life, in a plaine ground where there was scarce a pebble to resist his haste, his horse fell downe, and Maister Caverley under him.

The horse got up, and breaking from the hold his master had to stay him, ranne violentlie toward the towne, leaving Maister Caverley not able to stir from thence, where he was sooon overtaken by the pursuit, and indeed, ceased on by those who did both lament his fate and pitty his folly. From thence he was carried to a worshipfull gentleman's, one Sir John Savile, who having heard the tempest of this evil, and knowing from what ancestors he had sprung, did bewail his fate, yet being in the office of justice, he was forced to ask him the cause that made him so monstrouse. He being like a strumpet made impudent by his continuance in sinne, made this answer ; "I have done that Sir, I rejoyce at, and repent this, that I killed not the other. I had brought them to beggary, and am resolved, I could not please God better than by freeing them from it." "Oh, Sir," answered that worshipfull Knight, "you have done so much that when you yourself think upon the terrour of death, the remembrance of this will make you wish you had never been borne." But his hart being hardened, he was from thence committed to one Maister Key's house, a gaile but lately built up in Wakefield—for at this time the infection of the plague was very violent in Yorke. . . . It was not long before he came to Key's house ; he was not long there, but the memorie of his children sate in his eyes, so that for the one he repented all the day, and for the other lamented all the night ; nor can the pen of the divinest poet express half the grief in words, that he concieved in hart. For whereas before he told Sir John Saville, he was glad he had rid the world of beggars, he now employed his houres in these wordes, "I would I had these beggars, either I to beg with them, or they to ask heaven's almes for me."

This ill-fated lady eventually recovered from her wounds ; her husband was soon after removed to York, where he was tried, but refusing to plead either guilty or not guilty, (by so doing he saved the estates from forfeiture), he was sentenced to be pressed to death, and this was done in the Castle at York, August 5th, 1605.

The real facts of the case may be stated in a few words. Walter Calverley, of Calverley, was left early without parental control, to such supervision only as a

distant guardian could exercise. In process of time he married the daughter of Sir John Brooke, who bore him three sons. But he grew into a confirmed libertine. He incurred debts with a prodigal wilfulness, mortgaged the estate, and induced his nearest friends to become surety for large amounts. Want and dishonour menaced him. In a very few years the once bountiful estate of Calverley stared at him like a spectral shadow, while inward conviction pointed to an outcast's life. Woe and ruin threatened. Meantime as the struggle became fiercer to maintain a footing on the old ancestral sod, he gave his mad passions a yet looser rein; all this time treating his wife and children with the cruelest neglect and scorn.

And yet that good and virtuous woman loved him; would have given her life to save him. At his demand she went to sell her dowry. On arriving at London she found that her guardian knew well how her husband's affairs stood; but that gentleman, having influence at Court, promised that a lucrative government situation should be offered to Walter Calverley. Honourable employment, however, was not what he desired, but present cash, and on his wife's return, presenting the offer, his disappointment and chagrin knew no bounds. About this time a messenger came to say that his brother was arrested on a bond entered into on the brother's behalf. And then the devil seems to have got entire possession of Walter Calverley's soul, for seeing his eldest son, a boy little more than four years old, he stabbed him repeatedly with his dagger until he was quite dead. Then holding the gory corpse at arms length to prevent the blood saturating his clothes, the infuriated man rushed to his wife's chamber, where a maid was dressing the second child. The mother, awakened by the noise, and seeing the dread purpose in her husband's eye, clasped to her breast the living child; but all in vain, the demon father stabbed it in her arms, and aimed to kill his wife. Afterwards he took horse for a house in the village where his third child was at nurse; but the servants were now thoroughly aroused, and overtook their master in time to prevent another murder. A concourse of people soon surrounded and arrested the infuriated wretch, carrying him before Sir John Saville, of How-

ley, and Sir Thos. Bland. The following copy of the depositions taken on that occasion has been published :—

The Examination of Walter Calverley, in the West Riding of the County of York, Esq., taken before Sir John Saville, of Howley, also Sir Thos. Blande, Knight, two of his Majesties Justices of the Peace, the 24th April, 1605.

Being examined whether he did kill two of his own children, the name of the one thereof was William and the other Walter, saith that he did kill them both at his own house at Calverley, yesterday, being the 23rd day of April aforesaid. Being further examined what moved him to wound his wife yesterday, to that he said that one Carver going into the chamber where he was with his said wife he commanded her to will the said Carver to go and fetch another son of his whose name is Henry Calverley who was nursed by the said Carver's wife which she accordingly did, whereupon the said Carver, went into the court and stayed there about a quarter of an houre, and returned again, but brought not the said child with him, and being commanded to go downe again, he refused so to doe, and that therefore he did wound his wife, if she be wounded.

And being further examined what he would have done to the said childe if Carver had brought him; to that he said he would have killed him also, and being likewise examined whether at any time he had any intention to kill his said children, to that he said that he hath had an intention to kill them for the whole space of two years back and the reasons that moved him thereunto was that his said wife had many times theretofore uttered speeches and given signes and tokens unto him whereby he might easily perceive and conjecture that the said children were not by him begotten, and that he hath found himself to be in danger sundry times by his wife.

WALTER CALVERLEY.

JOHN SAVILLE.

THO. BLAND.

Cap' Coram.

Walter Calverley was committed to York Castle, there to await his trial; but the plague was then raging at York, so, whether from a generous consideration to the prisoner's health, or because the constables were themselves frightened to proceed thither, the murderer was eventually remitted to the "new jail at Wakefield."

On his trial he maintained a sullen silence, refusing to plead guilty or not guilty, thereby saving his estate from confiscation ; but he was condemned to be pressed to death, which sentence was executed on the 5th of August, 1605. It is said that his remains were secretly interred within the family vault of Calverley, but, as might be expected, there is no record of such interment. The parish register has the following notice :—

“Buried April 1605, William and Walter sonnes of Walter Calverley Esq.”

The mother of these boys, who was so grossly slandered by her brutal husband, recovered from her wounds, and with her sole surviving son, Henry, lived for many years afterwards. Walter, son to this Henry, was knighted by Charles II. in consideration of his father's loyalty, and the sufferings he had endured in those troublous times. He married the daughter of Henry Thompson, of Esholt, and thus attached another splendid property to the ancestral estate. The next Sir Walter appears to have cherished dislike both to the name and neighbourhood of Calverley. He removed to Willington, in the county of Northumberland, took the name of Blackett, and in 1745 sold Calverley to Thos. Thornhill, Esq., of Fixby, and the Esholt estate, on which his father had built a capital mansion, to Robt. Stansfield, Esq., of Bradford. It seems a matter of surprise that, although he severed all connection while living with the place where his forefathers had dwelt for about five centuries, that his remains should be brought here for interment. Thus it did happen, however, as the following inscription of a monument in Calverley Church will testify :—

Near this place lies the body of
Sir Walter Blackett,
Of Wallington in the county of
Northumberland Bart
Who died Feby 14th 1777 aged 69 years.

In 1608 appeared in print “A Yorkshire Tragedy, not so new as lamentable and true,” and the name of Shakspeare appears on the title-page as author. This short tragedy had previously been acted at the Globe Theatre, under the direction of Shakspeare. Some have stoutly contended that our great national dramatist

was really the author, although others, perhaps with more truth, attribute it to Haywood, a great playwright of the period. With all deference to some of Shakspeare's commentators, and Mr. Steevens in particular, I cannot trace the "characteristics" of our great bard in this drama. Take the following passage, selected at random, as a specimen. :—

WIFE.—O my repentant husband !

HUS.—O my dear soul, whom I too much have wrong'd ;

For death I die, and for this have I long'd.

WIFE.—Thou should'st not, be assured, for these faults die,

If the law could forgive as soon as I.

[The two Children laid out.]

HUS.—What sight is yonder ?

WIFE.—O, our two bleeding boys,
Laid forth upon the threshold.

HUS.—Here's weight enough to make a heart-string crack.

O, were it lawful that your pretty souls
Might look from heaven into your father's eyes,
Then should you see the penitant glasses melt,
And both your murders shoot upon my cheeks !
But you are playing in the angels' laps,
And will not look on me, who, void of grace,
Kill'd you in beggary.

O that I might my wishes now attain,
I should then wish you living were again,
Though I did beg with you, which thing I
feared.

O 'twas the enemy my eyes so blear'd !
O, would you could pray heaven me to forgive,
That will unto my end repentant live !

WIFE.—It makes me even forget all other sorrows,
And live apart with this.

But let us glance at the interior of this old hall. A decent-looking woman met us at the door, with one child in her arms and two or three others paddling by her side. Almost before we could speak a request to see the building, she appeared to guess the object of our visit, and was very assiduous in showing us every place of interest. We entered what appears to have been the common room, which is very lofty, and from which there was access to every part of the building. The ceiling

is in much the same state as when the builders left it, having never been disfigured with whitewash, and no one can look upon the massive fluted joists without feeling what a sterling thing is that "heart of oak." Heart of Oak !—it gains strength and vigour after a growth of five centuries, and will further exist in a dry and sapless form for a thousand years. A large piece of oak panelling, taken from the murder room, has recently been fixed so as to form a passage from the outer door and to screen the wind. The good woman of the house pointed to a dark stain upon one of the panels, saying it was the mark of blood, and that no soap and water could ever wash it out.

To the right is a smaller lower room, beautifully panelled, and containing an antique chimney piece, above which were blazoned the Calverley Arms, but which escutcheon had been removed a few years ago to oblige the Blacketts, who were anxious that no such memorials should remain. We may conjecture from this circumstance that had the estate remained in the family the whole building itself would have been levelled to the ground. The oak panelling here exhibits no signs of decay, but has only grown harder and darker with age.

A staircase leads from hence to the murder-room, but as it was somewhat dark and narrow we ascended by the rough stone steps outside the building into what may be called the principal hall. This, the chapel beyond, and one or two smaller rooms are all employed in the manufacture of cloth. As before mentioned, a part of the panelling has been removed from the murder-room into the kitchen, leaving bare the original partition, which is simply formed of oak boards overlapping each other in a very rude manner. That this was the original partition is evident from the fact that it is covered with paintings of human heads, surrounded with designs of the *fleur-de-lis*, all very roughly executed.

Half a century ago almost every old hall or manor house had its family ghost ; no wonder, therefore, that this hall of murders should be specially haunted. Richard Birdsall, commonly called Dickey Birdsall, was on one occasion "directed" to preach at Calverley Hall, where he stayed all night. He says in his journal :—

"About twelve o'clock I was conducted up one pair of stairs into a large room, which was surrounded with an oaken wainscot, after the ancient plan; some packs of wool were lying on one side of the room. After my usual devotions I laid down to rest. I had not been asleep long before I thought something crept up to my breast, pressing me much; I was greatly agitated, and struggled hard to awake. In this situation, according to the best judgment I could form, the bed seemed to swing as if it had been hung in slings, and I was thrown out on the floor. When I came to myself I soon got on my knees and returned thanks to God that I was not hurt, and sought His aid and protection for the future. Committing myself to His care, I got into bed the second time. After lying for about fifteen minutes, reasoning with myself whether I had been thrown out of bed, or whether I had got out in my sleep, to satisfy me fully on this point I was clearly thrown out a second time from between the bedclothes to the floor, by just such a motion as before described. I quickly got on my knees to pray to the Almighty for my safety, and to thank him that I was not hurt. After this I crept under the bed to feel if there was anything there, but I found nothing. Once more committing my all into His hands, where only safety can be found, I got into bed for the third time. Just as I laid myself down I was led to ask, 'Am I in my senses?' I answered, 'Yes, Lord, if ever I had any.' I had not laid above a minute before I was thrown out of bed the third time. After this I once more crept under the bed to ascertain whether all the cords were fast, and examined until I touched all the bed posts, but I found all right. This was about one o'clock. I now put on my clothes, not attempting to lie down any more; and for six hours I experimentally and forcibly felt the truth of these words—"For we wrestle not against flesh and blood, but against principalities and powers, against the rulers of the darkness of this world," &c. The reader may probably wonder at all this, but I do not; for although Satan be cast out of us, he will perplex and harass us, but beyond his chain he cannot go.

At an early hour I left this house, and have never visited it since. I was afterwards told that this very house had formerly been the residence of Sir Hugh Calverley [a mistake for Walter Calverley], who in the reign of King James (as the history of England informs us) was tried at York, for the murder of his wife and

two children, and standing neuter, was pressed to death in the castle. Report says that he appeared again, and that after some time he was conjured down ; but this report I give to the reader as I received it, not being called upon to hazard an opinion on the subject."

Mrs. John Marshall said they had lived at the old hall six years, but she had never seen "any sperrits, nor was any sperrits iver mentioned by the tenants before them ;" so we may now fairly conclude that the spirit of Bloody Calverley has been effectually "conjured down."

While engaged in scribbling a few remarks my companion drew a hasty sketch of the ancient building. And then we proceeded to catch the train at Apperley Bridge about a mile and a half distant, descending one of the most precipitous roads I ever beheld. The prospect all the way, however, is exceedingly beautiful, studded as the landscape is with Rawden College, Woodhouse Grove Schools, and several private residences of no mean pretensions.

THE HERMIT OF LINDHOLME.

CHAP. I. IS MERELY AN INTRODUCTION.

Of all places in England Hatfield Waste is one least adapted for a hermitage. For who is a hermit, and what is a hermitage? A hermit, generally speaking, was an old bachelor of pious tastes and indolent habits, who habitually neglected his toilette and extemporised an easy living on small means. And a lazy life it was. Still the hermitage was generally well selected in a picturesque locality. Wordsworth says, speaking of a wren's nest—

“The hermit has no finer eye
For shadowy quietness.”

His cell was in the mountain's side, or his hut was hidden snugly amongst the forest trees. By its side flowed the running brook, from which the lonely man might quench his thirst, while within easy distance hung the clustered nut, or some native wild fruit on the tempting bough. The surrounding woods supplied him with fuel for his fire, and eke a bit of savoury meat, now and then, for his board. In short a hermitage was not generally chosen without the hermit having his “weather eye” open. Nor was he always so solitary as some imagine. Certes, he was not supposed to seek society, but society not unfrequently sought him, and if a traveller chanced to call that way, and pay him a pop visit, it is true he had to take “pot luck,” but who so jolly and hospitable as a hermit? At times he was seen in the busy haunts of men. From brooding solitude issued thoughts and schemes which shook the world, and a Peter the Hermit, like a John the Baptist from the Wilderness, aroused the nations at his call.

But hardly any of these conditions apply to the Hermitage of Lindholme. It is difficult to conceive a scene of more dreary desolation—a wide, dismally flat, sterile, monotonous, inaccessible bog or swamp, without sign or

sound of life, except the hare or rabbit running on its track, the plaintive cry of the moorfowl to its lost mate dying away in the distance, or the voice of the bittern shaking the marsh.

Did there ever live a hermit of Lindholme? If so, what was his character, and what were his pursuits? For centuries past, throughout the Level of Hatfield Chase, tradition has perpetuated the name of a recluse named William, assigning Lindholme in the centre of Hatfield Waste as the place of his abode. Lindholme is an elevated track of about sixty acres, in the centre of a vast bog, which before the drainage of 1626 would be surrounded with water, and even since that period could only be approached in excessive drought or severe frost. There is evidence that this island contained a very ancient hut or cell, and that this hut possessed an inhabitant. In 1727, G. Stovin, Esq., together with the Rev. Samuel Wesley, visited the place, and the former gives the following account of their discovery: es

“The people of Hatfield and places adjacent have a tradition that on the middle of Hatfield waste there formerly lived an ancient hermit who was called *William of Lindholme*; he was by the common people taken for a cunning man or conjuror, but in order to be better informed, I, accompanied by the Rev. Mr. Sam Wesley and others, went to view the place, and after passing the morass, found the hermitage or cell situate in the middle of sixty acres of firm sandy ground full of pebbles, on which was growing barley, oats, and pease. There was likewise a well four or five yards deep, full of clear spring water, which is very remarkable, because the water of the morass is the colour of coffee. Here is great plenty of furze bushes, and variety of game, such as hares, foxes, kites, eagles, curlews, ducks and geese; there is no house or cottage near it, and but a few old oaks, willows, and birch; the house is a little stud-bound one, and seems ready to fall. At the east end stood an altar made of hewn stone, and at the west is the hermit's grave covered with a large free stone that measures in length eight foot and a half, in breadth three, and in thickness eight [query, eight inches?], which, with the consent of Richard Howlegate, the present inhabitant, and the help of levers, we raised up and removed, and digging under found a tooth, a scull, the thigh and shin bones of a human body, all of a very large size; we like-

wise found in the grave a peck of hemp seed, and a beaten piece of copper. It is difficult to imagine how such vast stones should be brought, when it's even difficult for man or horse to travel over the morass, which in some places is four miles across, on which grows an odoriferous herb called gale, and a plant named silk or cotton grass from its white tuft on the top resembling the finest cotton wool; 'tis supposed before the draining the Levels of Hatfield that there was great plenty of water by which the great stones must have been conveyed; this I think the most probable conjecture."

Besides the altar and massive gravestone mentioned above, which have long since been removed, there are two large boulder stones still to be seen, called the "thumb-stone" and "little finger stone," which tradition says the hermit brought hither, balancing them, one on his thumb, the other on his little finger. Verily he had need of great physical strength to have carried them in any manner.

Tradition says that, living all alone in the island, the hermit became his own sexton, actually interring himself. When his compact with Satan was just terminating, he dug a hole under the great stone, which was elevated on "slips;" then, lying down in the grave, pulled the block upon himself.

It is almost certain, therefore, that a man with the physical proportions of a giant did reside on the island, or such bones would never have been found here. But the question again arises—what was the character of this recluse? Was he simply a religious devotee, or a kind of Paracelsus, a mortal being endowed with supernatural and Satanic powers? It was commonly supposed that solitary fens, and dark, noisome marshes were peculiarly the abodes of infernal spirits, that these assumed tangible forms, and could be handled, tethered, and even sold. In the Court Rolls of Hatfield is found a plaint, entered during the reign of Edward II., in which Robert de Rotherham charges John de Ithen with neglect in not delivering to him at Thorne a certain Devil, bound with thongs, for which the said Robert agreed to pay *threepence halfpenny*, having made a tender of an *Earls-halfpenny* to strike the bargain. Damages were laid at sixty shillings; but the Court ruled that it had no jurisdiction, on the ground that

such transactions were not acknowledged amongst Christians. How, not gaining possession of his Devil, the plaintiff suffered loss to the extent of sixty shillings, does not very clearly appear. Perhaps he calculated the demoniacal agency, which would be exercised on his behoof, as worth so much money. True, there seems a great disproportion between the market price of the article (threepence halfpenny) and the large amount claimed for breach of contract, although it might be urged that not many persons would be willing to accept possession at any price.

It is well to bear in mind how important a part the superstition of men has played in the religious development of the world. An unenlightened mind needs something actual, visible, sensuous to keep alive its faith in unseen realities ; and this demand has ever created its supply, "a miracle being faith's most darling child." The Devil in particular, used to live in the world on very familiar terms with its inhabitants. Though more shy of showing his nose in good society after St. Dunstan grasped it with a pair of red-hot tongs, yet he was not unfrequently to be seen for generations afterwards, until the very dawn of the Reformation. We believe the last *authentic record* of his visible appearance was to Martin Luther, when the great Reformer flung an inkstand at his head. The significance of the circumstance attending his final exit has never been fully appreciated ; an *inkstand* sent him out of the world. Satan never could survive the use of ink, and his visible, personal reign ended with the era of writing and printing.

That William of Lindholme was a remarkable character we may safely assume, even from the peculiar circumstances of his lot. Our hermit lived in a swampy fortress. Religious asceticism, apart from malevolent passions or great crimes, may have induced this self-immolation. Abraham de-la-Pryme, a local antiquarian, who was familiar with Lindholme during the seventeenth century, puts the hermit before us in a very estimable point of view :—

" Within a humble lonesome cell
He free from care, and noise does dwell,

No pomp, no pride, no cursed strife,
Disturbs the quiet of his life,
A truss or two of straw's his bed,
His arms, the pillow for his head,
His hunger makes his bread go down
Although it be both stale and brown,
A purling brook that runs hard by
Affords him drink whene'er he's dry.
In short a garden and a spring
Does all life's necessities bring.
What is't the foolish world calls poor?
He has enough; he needs no more;
No anxious thoughts corrode his breast,
No passions interrupt his rest,
No chilling fear, no hot desire,
Freezes, or sets his blood on fire,
No tempest is engendered there,
All does serene and calm appear,
And 'tis his comfort when alone,
Seeing no ill, to think of none,
He spends each moment of his breath
In preparations for his death,
And patiently expects his doom
When fate shall order it to come.
He sees the winged lightning fly
Through the tempestuous angry sky,
And unconcern'd its thunder hears,
Who knows no guilt, can feel no fears."

Local tradition does indeed assign to this hermit of Lindholme a very different character, it is now almost universally believed that there was something "uncanny" about him, and dark whispers have been afloat that he sold himself to the devil. O, for the wizard's power that we might annihilate a few centuries, and conjure up (only in imagination) the man and the circumstances of that mysterious age!

CHAP. II.—BRINGS THE HERMIT TO VIEW, AND DISCLOSES SOME PARTICULARS RESPECTING HIS MANNER OF LIFE.

It was cold weather, clear but frosty, with thin flakes of small snow falling at intervals. The ground was hard as rock, all the pools and ditches were hard with ice, so that people could travel anywhere in that hard winter of 1435. It was only at such a season that any pedestrian ventured to traverse many parts of Hatfield Chase. But King Frost is a famous Macadam, or rather the Vulcan of roadmakers, for he puts a strong molten girdle round the earth in a trice.

A young Isleonian [a denizen of the Isle of Axholme] wanted to see the desire of his life, wanted to feast his eyes on the plump form of bonny Jenny Scott, and listen to that merry ringing voice, the tones of which memory kept faintly echoing all the year round. But he lived at Haxey Hall Garth, and she lived at Barnby-on-the-Don. True, he heard from her occasionally, when some stray merchant or enterprising drover made a perilous journey across the marshes, by old sloppy bridle paths, with here and there a line of flagged bank, not wide enough to allow one pack-horse to pass its fellow. A local traveller, in those days, was burdened with messages ; and what wonder if absorbed in his own affairs, he neglected to deliver some of those precious answers and love-tokens, which were of no concern to him, but fraught with interest to the parties themselves. We, in this age of writing and rapid locomotion, can but feebly appreciate those serious consequences attending the omission of a simple message.

Young Greaves, of Haxey Hall Garth, had been much troubled at not hearing from his mistress ; he resolved therefore to carry a message himself ; then he would be sure to get an answer ; so on this particular cold morning, he started off a full hour before day-break, not without some pressages of fear in his heart. A few stars blinked in the sky, rarefying the gloom but very little, and it was difficult to distinguish ten yards before him, even such large objects as wide spreading

trees. When day-light slowly appeared, the sun was still hidden in the clouds, and, seeing no track, young Greaves cut a twig, notched the end thereof, and threw it up into the air. Master Greaves believed in fate, devoutly regarded omens, and therefore resolved to follow that direction on the ground to which the notch pointed. This proved rather an unfortunate decision, since the notch pointed much further toward the east than the course he should have taken. Our brave pedestrian pursued his way for two or three hours without meeting a single human face or habitation, although as he swept along many a startled wild bird crept lower in its bed of frozen rushes, or took to flight with a clamorous cry.

On a wide and dreary waste there are not usually many landmarks, or points of observation, still our traveller thought he must be out of his latitude, since the aspect of the country seemed altogether new and strange. He had never before traversed such vast pools, the surface of which was in many places very slippery, while before him, in almost a straight line, rose a broad patch of elevated ground, containing a number of bare trees: this place he had certainly never seen before, so he advanced towards the spot, thinking that it might possibly contain a few inhabitants, feeling sure of one thing, that however far he might have deviated in his course, the waste would terminate somewhere, that he could not travel many miles further without reaching a human dwelling. And he went briskly on. Presently was heard a loud rapping noise, as if some one was beating the ground with heavy strokes. The strokes were not only vigorous but regular, such as, in Master Greaves' opinion, no beast or bird could make. Our traveller hastened to the spot with cheerful eagerness, but had the young man known what was to follow, he would have taken a different route I ween. On passing a clump of trees he came suddenly in contact with a being of gigantic stature; who might very well be taken for the Demon of the Moors. His dress was formed from some kind of skins, but of what kind could scarcely be determined, since the pelt was worn outside, the fur or hair being next to the wearer's skin. The coat or tunic was sewn together with grass, or the

strong rind of rushes ; so were his nether garments, and both were bound to his body with vegetable thongs. In the platted girdle encircling his waist was stuck a formidable looking dagger or knife, a hook, made so as to serve numerous purposes, an axe, and one or two other implements, respecting which it would be difficult for us now to assign a use. A large hairy cap formed of foumart skins encompassed his head, from which depended a perfect avalanche of matted hair, which, reaching far down his shoulders intermingled with a beard of most portentous length. The giant heeded not the approach of his intruder, but continued breaking the surface ice of a great pond, no doubt with the design of luring wild fowl. Suddenly it struck our traveller that this must be the terrible hermit of Lindholme, whose exploits were the theme of wonder for many miles round. Master Greaves, therefore, crossed himself, and would have sped secretly from the place, had not the hermit turned his keen grey eyes in that direction.

"Young man," said he, "what object brings you here?"

"I am a stranger, and have lost my way."

"Then you shall be my guest, for this day, at least ; and when the moon is risen assist me to catch the wild fowl."

Master Greaves trembling like an aspen leaf, replied — "Pardon me, but I must speed on my way ; affairs of importance require my presence at Barnby before nightfall ; indeed, I must make all haste."

"Did I not say you *shall* be my guest to-night. Not often are these eyes gladdened by the sight of a human face. Certes, I think sometimes this tongue of mine, for want of exercise, will lose the proper use of speech. Alack ! alack ! the last visitor to my poor hut was fetched here by compulsion."

The young man looked furtively at the ogre, dreading some fearful revelation.

"It was mid-autumn, the weather for weeks continued scorching hot, the heather was dry as tinder, the lesser pools were all dried up, and people ventured, now and then, to cross the waste. But little do men dream how deceptive the moor is—a dry surface moss

often conceals a deep pit. A stranger ventures where he thinks there is foothold, sinks up to the waist, and, perhaps, it is only by stretching out his arms that he can prevent sinking over head."

"People are foolish for travelling this way at any time," remarked young Greaves. "Some, no doubt, are buried alive."

"Buried alive, yes, and I get the blame of having spirited them away. But listen to me. Three moons ago, about the middle of a day, I heard a distant cry, and felt sure that it came from some foundering traveller; so tying on my bog-shoes (you shall see them—they are each about a yard long), shouldering, also, a five yard pole, I gave an answering hallo, and set out on the chase. Now there was prospect of help, the bogged wretch screamed lustily. Guided by the sound, I soon arrived at the spot, when laying my pole across the swamp, a pair of hands grasped it with all the avidity of hope. My victim was a man older and heavier than yourself; indeed it required a famous haul to draw him out of the bog."

"You saved the man's life, and thereby deserved some gratitude."

"He, he, he! I got but scant thanks, however, for when the soaked wretch saw his deliverer, he would have fled as from the devil. I laid my hand on his shoulder, giving him a slight push onwards, when the coward gave such a terrible yell, and seemed so helpless, that I fastened his carcase to the pole and carried him in mid-air. Ho, ho, ho! how he did roar and wriggle; I could scarcely hold the pole for laughter. Ha, ha, ha! Wasn't it funny?"

"Very," replied young Greaves, making the most doleful attempt at a laugh, for it could scarcely be expected that in his situation, the young man should appreciate the excellent merits of such a joke.

"Long before we reached the hut the man on the pole had fainted, and for five days afterwards was in a burning fever. I bled him, physicked him, nursed him, and liked the duty. It was curious to mark what effect a high fever had upon the mind and body of my patient. For many hours together he lost all sense of present circumstances, did not even know me; and yet

his body writhed in fearful convulsions, tasking a little of my strength to hold him down. Once and again he clutched me with a maniac's grasp, his eyes rolled, every feature was aghast with terror; and yet, except the panting, or rather croaking of an exhausted frame, no sound escaped his lips. Was not that curious?"

"Strange that his lips should not have expressed what was raging in his mind," replied the young man.

"Very strange," continued the hermit. I watched all the symptoms with the keenest zest, marked the effects of various applications, howled in his ear, dropped water on his face, pricked him."

"And what became of your patient in the end?" enquired Master Greaves, with some anxiety in his voice.

"Ha!" replied the hermit, "you must ask me that question in the morning. But we will now proceed to my poor hut, for this bracing air sharpens the appetite; and, humble though the meal may be, William of Lindholme is not so churlish as to deny a morsel to the stranger."

If any man had cause to make a "virtue of necessity" it was Walter Greaves; he liked not the invitation, we may be sure, but it was useless to resist, and until opportunity presented itself of escape resolved to acquiesce in all the terrible hermit's whims. After a short walk they espied the hut, which was neither so small nor so cheerless as the young man had anticipated, for, evidently, a great amount of labour had been bestowed, not only to make it impervious to the weather, but to give a character of stability and even ornamentation to the place. It was clear enough that, whatever devilish rites or superstitious notions he might adopt and practice, this giant recluse was no grovelling maniac. On opening the door they discovered a few embers smouldering on the hearth, which were soon quickened by the addition of some dry logs taken from a corner of the cell, and the hermit began to make preparations for their present and future meals. Some cakes of bruised corn, baked upon the hearth, together with the remnants of cooked fowl were placed upon the board, while the visitor was enjoined to help himself,

the hermit tearing and devouring large mouthfuls of the viands by way of example. Wine or other intoxicating liquors the hermitage did not possess; their drink was water, and good water too. Afterwards the hermit proceeded to strip some wild ducks of their feathers, during which time a great deal of desultory conversation was indulged in, until at length young Greaves became so bold as to pry into the hermit's history, why he forsook the world and decided upon a secluded life amongst these dreary swamps. While the wild ducks were fizzing on the fire, the hermit reclined on a couch of ling, according his visitor the chair of state, which was the root of a tree, curiously but comfortably fashioned, and then this strange man told the story of his life.

CHAPTER III.—IN WHICH THE HERMIT DISCLOSES HIS PRIVATE HISTORY.

"I was born in the county of —— no matter what county, it is a long way from here. My father was a yeoman, and we lived in a grand old house, where our ancestors had resided for many generations. Excepting the Ve—— Tush! never mind the name—call it Ventager; except the Ventagers we were the chief family in the village. I was an only child, while the Ventager had a house full of sons and daughters: he had also an orphan niece and ward. In the morning of life she became the star of my destiny."

"I thought there would be a woman in the case," replied Master Greaves; "a woman and the devil are agencies sufficient to account for anything."

"They have both been largely concerned in my experience" continued the hermit. "But let me not forestall the order of events, let me first introduce you to Leila. In childhood we were playmates, and I can scarcely tell the precise time we became lovers; no doubt the emotion arose before it was consciously acknowledged to ourselves."

"A prettier, merrier sprite than Leila did not exist. And yet, at times, the girl would sit so silently apart;

and I used to think she seemed more like an angel thus pensive than when in mirth. Suddenly Leila would catch me gazing like one inspired into her face, then waked up as from a reverie, saying—"Tell me, is there any joy in the universe like loving and being beloved? If ought could do it, holy thoughts of Leila would exorcise the devil that is within me.

"Young man, did you ever experience a time when life was purely delicious, when the essential purpose of living was ratified in happiness?"

"I have felt something like this."

"H—m. I know who you are, and why you are taking this journey."

"But I have never set eyes on you before to-day."

"We have never met before; but I can read thy past history, and, if desirable, could tell something of the future. Even now thy thoughts keep reverting to a maiden by the river: this journey, so unwillingly prolonged, is undertaken on her account."

Walter Greaves, trembling, thought within himself—This fearful man has not his name for nothing. But he ventured to ask if this suit of his would terminate happily.

"Young man," replied the hermit, "there is sorrow in store for thee. Even now cruel fate is thwarting thy most cherished desires: but thou wilt conquer in the end. And now listen to my tale, for to both of us the recital may beguile an hour of weary torment. I was speaking of Leila and myself, of our childhood and early loves. Years passed on, tending to make us more like one being in affection and thought and purpose. But we were not one, there was a blank left, something wanting. Leila was very dear, but I wanted to call her all my own; so I spake to my father about a cottage there is on the Linthwaite Edge, and craved a little settlement. My parent for a moment was like one struck dumb; then he gave vent to such a storm of passion that I was taken quite aback, not anticipating this vehemence of displeasure. 'Marry the penniless niece of Ventager,' said he, 'but mind this, my doors will be closed against you and her for ever.' Former experience told me that my father's resolution would never change. I retired from his presence sick at

heart, but saying not a word in reply, and for days those ordinary pursuits and healthy pastimes became distasteful to me. The greatest of evils is a parent's malediction ; but separated from Leila the whole world was a blank. I must either renounce Leila or become an alien and an outcast : then what would become of us both ? The best we could hope for would be a servile dependence on an uncle's land. A week dragged on slowly and painfully, for although longing to tell her all, I yet dreaded, and postponed the interview. At length I set out to see Leila once more, and beg of her to wait."

"Good !" exclaimed involuntarily the young man. "Heaven will consummate all honest vows, and drive the evil from us."

"When I came near the house there seemed a loneliness about it ; even the serfs, who were ever forward with a welcome obeisance, now appeared indifferent to my approach. Leila was generally the first to accord a loving welcome, but there was no Leila there now ; her uncle and guardian stood in the entrance hall. He beckoned me to follow him, and when we gained his private room, thus blasted all my hopes :—Your father has been here, and with foul words accused me of baseness. He said I was beguiling his sole child to an unworthy marriage. You I respect and pity, but Leila never shall be yours. Poor as she is, the Lord of Lorn has craved my niece's hand, and I have given my pledge that queenly Leila shall grace the house of Lorn."

"But you will let me see her, hear from her lips if she accepts this rich new suitor, and take one last farewell." Thus did I plead."

"No," said he, with a flash of scorn, "'tis best you should not see her. So tell the 'Squire of Linthwaite I plot now to place my niece in a far higher sphere, and spurn his proud alliance. Never come here again."

"So, for no fault of mine, I was driven from a house where had passed the happiest hours of my life. Bewildered by the stroke, in my retreat I stumbled upon a waiting-maid, who said she had a message for me : Mistress Leila was going to be married, and had sent to say that she never wished to see me any more. I found out afterwards that all this was a base fabrication. In the extremity of sorrow, with the fever burning in my

veins, I sought council of forbidden guides. A witch lived on an adjoining common in a dilapidated, miserable hut. The wrinkled old hag is before me now, but you cannot see her. See ! she is grinning at me with a weird laugh on her hideous face ! Avaunt !”

Young Greaves crossed himself, and closed his eyes, when the hermit continued—

“It was a wild, stormy night, the wind howled, and the rain poured down, but I hurried on to this home of the witch. After knocking three times I noticed a dark object flying through the air, which entered a hole in the roof where the smoke came out. The owl hooted, the frog croaked, the snake hissed ; but amidst these discordant sounds a screeching voice bade me enter. I entered, and there crouched the witch, throwing into a seething cauldron a mangled lifeless head, which grinned horribly, human hair clotted with gore, the body of a murdered infant, two spans long, and such like food. While the cauldron seethed the witch yelled her fiendlike incantations, keeping up a frantic dance in the magic circle. Flaming snakes, and hideous shapes of air rose from the pot. The old hag advanced towards me, chaunting a kind of ditty—

Who comes here

Had need beware,

For the devil and I are cousins.

And then she danced again her frantic round with greater vehemence. I have heard of the dance of devils, and the dance of death, but never before saw fierce passion and furious motion so closely allied. When the old hag was in a mood to listen, I made known my request.”

“Which was — ?”

“To be rid of my rival, in any way, at any cost. The witch shook her head. Her power did not extend so far. She could scare people, and laugh at their torments, but it was the devil who did the mischief—she was only the devil’s drudge.”

“Then witches, and a— a—.”

“Out with it — witches, and wizards, such as myself.”

“How do you know that present company was in my mind !”

"Because the devil at the same moment told me so."

"All this puzzles me," exclaimed the young man. "I believe that some particular demon, at times, perhaps, a whole legion of devils may be near or about us, even in us, tempting, cajoling, threatening. We may not see them with these bodily eyes."

"Would you like to see one?"

"Not for the world. Yea, by the help of Heaven, I'll keep them all at bay: and yet I'm puzzled. How can infernal beings so change the natural order of events to gratify a votary's desires. A few have been so wicked as to—a—a——"

"Speak out; you include myself."

"Heaven helping me I'll speak it out, and fear not fiend or wizard."

"I know your thoughts; but let me put the case. One man craves riches, and then because Heaven will not forward his desires, he throws off all allegiance to the Divine, and supplicates the demon. He gets his wish fulfilled."

"How? The devil is not Almighty; his power is restrained within a certain limit."

"The emissaries of our Prince are active, spreading information both particular and general. Their observation is wide, and their knowledge is vast. Almost as vast as our feeble conceptions of the infinite are the faculties of disembodied spirits, for the barriers of sense are all removed; they know the alphabet of spirit thought. They tell of one and another mortal who will barter the prospects of eternal happiness for gold—deliberately do this. It is an easy thing to tell him where a hoard of gold lies hidden, or point out some unfailing mode by which great wealth may be amassed. And so with any other purpose man may have; the power and circumstance is so controlled that he attains his end. But in the end the devil safely gets him."

"There may be truth in this," replied young Greaves; "but after all we do not need satanic influence to make us like a demon. At heart we are just what we choose to be." Then after a few moment's silence he continued—"But if we sell ourselves, body and soul, to Satan, then Heaven renounces us for ever; we place ourselves beyond the reach of hope. This is the

deadly sin, unpardonable; and wicked Jews in ages long ago did taunt the Saviour with it."

"But," interrupted the hermit, "do you wish to hear any more of my narrative?"

"I wish to hear it through."

"Then pay attention. While talking to the witch a stupor seized me (this was a token of satanic presence), and when I had partially recovered, there, sure enough, was a devil in the hut."

"In what form did he come?"

"Like a great ape. But the light in the hovel vanished, so that I could see dimly and indistinctly. The fiend had wings bristling with feathers, and each feather at the tip was armed with a claw; his hands and feet were claws, spread open wide. But what a fearful head!—beak like a bird of prey; eyebrows like scars of lurid red; hair formed of twisting snakes; a deep cavernous mouth, armed with projecting teeth; great goggling eyes like globes of fire, flashed their lightning jets, then tinged the atmosphere with pallid glare, shewing the cloud of darkness curling round, made by his smoky breath. In a hollow sepulchral voice, like an echo from the depths of the grave, this dreadful being demanded why I summoned him? I was speechless, paralysed, like one half dead with fright, 'til the witch took a murderer's skull, and filling it with broth from the cauldron gave me to drink. After just tasting the mess it fell to the ground, and broke into flame, when, fired by madness (for the demon revenge was paramount then) I cried out—'To be rid of my rival.'

'That may be done,' said the devil; 'but I do not give aid for nothing. I want terms for my services, and a written contract must be signed between us.'

'And what are the terms?' I demanded.

'That I may claim you for my own after fifty years: in the meantime you will be gifted with more than mortal power.'

'I accept the terms.'

"The witch now advanced and placed my hand in the devil's claws, one of which pierced a vein, from which the blood flowed copiously. She then plucked a feather from the devil's wing, and scrawled her hellish charac-

ters upon a parchment scroll. On this I made my mark in my own blood.

"Then the devil vanished, when the hut became suddenly a blaze of light; and there was the witch in a frantic dance round the magic circle, chaunting this ditty—

The bat and the owl
May hide in a cowl,
But the devil will have his own.

When the dance was ended the witch said—'Meet me here again next Friday night.' And I gave her my pledge."

CHAPTER IV.—SHOWS WHAT CAME OF THE HERMIT'S CONTRACT, AND HOW MASTER GREAVES SAVED HIMSELF BY FLIGHT.

The witch haunted Ventager's house in the shape of a black cat: she wanted to know particularly how the Lord of Lorn stood with Leila. But why take the form of a black cat? Because then she could see in the dark, and hide in a corner, and purr unobserved while the lovers were purring. What so active and stealthy as a lithe black cat?

The witch lost no time in bouncing through an open window, and sat under a cupboard in Mistress Leila's room. Mistress Leila was at her embroidery, busy working in the lips of a warrior knight; and an ugly mouth she made; her fingers trembled because her mind was preturbed. But soon the door opened, and in stepped a gallant wooer. In appearance and attire he seemed a proper man, such as no lady need be ashamed to own; he had, also, a very pretty manner of speech; indeed, his whole bearing was excellent, neither too bold nor too shy. Mistress Leila rose and curtsied courteously, showing no little grace; then with eyes fixed earnestly on the canvass, she plied again her busy needle.

"Ever industrious," began the young man. "These works of taste will be looked upon with pride and pleasure when the artist is a cosy old woman; years

after that, when she is no more to be seen, bright eyes will turn to the tapestry and say—These are the work of our great great grandmother Leila, all done by her own busy fingers, long, long ago ; and then some personal reminiscences of that dear old relative will be related for the thousandth time, of her great personal beauty, her clever winning ways, and the happiness she vouchsafed in yielding her hand to—shall I say Henry of Lorn ?”

The gentle Leila said nothing, but continued stitching away at the canvass.

“O, bye-the-bye, your old friend and playmate is going to be married.”

The maiden gave an involuntary start, the blood rushed to her temples, and then became as it were congealed ; there was first a deep carnation red, and then a snowy paleness, while the black cat which sat under the cupboard purred with delight ; the lie was so subtle and effective

Poor Leila, it was not to be expected that she should so soon forget the attachment of a lifetime ! True, for some unknown cause he had forsaken her ; true, her guardian, with an unwonted bitterness of manner almost compelled her to receive the attentions of another (who in a worldly point of view was every way desirable), but old love is not like an old dress or ornament which may be put on or off according to the caprice or policy of an hour.

“You know, perhaps, whom he is engaged to wed,” continued the young man.

“No, I do not.”

“Epps, the rich miser’s daughter.”

“I cannot believe it,” she replied ; for with a pardonable vanity Leila could not help instituting a comparison between that girl and herself.

“On my honour, it is true. Come with me to the ‘tilting bout’ at Oulton ; there you will have an opportunity of seeing in what relation they stand to each other. Let me have the honour of escorting you thither, for Mistress Leila cannot be ashamed to meet him.”

“Ashamed ?”

“Promise that you will go.”

“ Yes, I will be there.”

The black cat had heard enough for present purposes, so she stole round the room like a guilty thing, and then with a bound made her exit by the same road which she came, startling both the young people, and leaving in Mistress Leila's mind the impression of an unfavourable omen.

It was all a lie, the subject of our history was not engaged to Epp's daughter. During the whole course of his life he had not cared to cultivate an acquaintance with that damsel ; certainly he never dreamt of making her his wife. And yet the fabrication served its end, which was to secure a companion in Leila at the “ tilt-
ing bout.”

The black cat, alias witch, did not reassume a human form until she was concealed from observation in her own hut on the common : what transpired afterwards had best be chronicled just as it was related by the hermit to Master Greaves.

“ When my compact with Satan was ratified,” he observed, “ it seemed as if all tenderer feelings were put away : I was conscious of the loss, without regretting the consequence. Some emotions were certainly intensified, hate for my rival was fixed and deadly, and, though above all other things I desired to gain Leila, the passion was but a consuming thirst for possession, just as the miser pants for gold, or the adventurer pants for conquest.

“ I kept my appointment with the witch, fearless now of her devilish incantations. Since I became one of the fraternity there was less of mystery and more cordiality in the old hag.”

“ A certain *good* fellowship was established between you ?”

“ Exactly. She had no terror for me now, even the most horrid and blasphemous rites would have awakened within me no abhorrence.”

There was a deep, general truth in all this, and although not audibly, the young man prayed—“ Deliver us from evil, for sin has a hardening influence.”

“ Then the witch began to open out her budget— ‘ I have been up to the Ventager's house,’ said she, ‘ and had an interview with Mistress Leila.’

“ ‘Did she seek you, or you sought her?—Pooh! I am sure she would not send for you.’

“ ‘I formed one of three in her own private room. But she did not know that I was present; her ears and eyes were too much engrossed by another and more welcome visitor.’

“ ‘It was the Lord of Lorn,’ I exclaimed.—‘Perdition seize him! How did he address her?’

“ ‘He went down on his knees to kiss her hand, and sued in such a humble guise, as if she were in rank, same as in personal loveliness, placed far above him. And didn’t she like the homage? Take my word for it—the best way to a woman’s heart is through her vanity.’

“ ‘A blasted lie!’ I answered. ‘Leila was never vain.’

“ ‘Henry of Lorn is shrewd,’ replied the witch; ‘and the devotion of so rich a man seemed on the surface truthful. How touchingly he then described the life in his castle home, with such a bride as Leila. The lady is not vain. Oh, no; but I could see the gleam of anticipated pleasure in her eye, also the tinge of triumph lighting up her brow. Zounds! how she blushed as he paused for answer. And when he raised his lips for an embrace she kissed him.’

“ ‘Oh, how the demon Hate did stir within me; I gnashed my teeth with rage.

“ ‘To-morrow is the tournament at Oulton,’ the witch continued. ‘Mistress Leila will proceed thither on a richly caparisoned palfrey, ambling by the side of—’

“ ‘Tell me no lies, witch.’ I exclaimed.

“ ‘Ambling by the side of thy rival: to-morrow will show whether my words are true. Listen to me. Thou knowest the large whych-elm of Inglewood?’

“ ‘I know it.’

“ ‘Meet me there in the morning, two hours after sun-rise. I’ll bring a draught which shall protect thee from the lance and the spear; after which face this lordly rival, and fight for the hand of Leila. But go away now, for I have other business at present, which concerns thee nothing.’

“ ‘I am getting sleepy,” observed the hermit; “for

last night I was out netting the wild-fowl ; now I have a companion we will have some rare sport to-night."

"But I want to hear what took place between the Lord of Lorn and yourself, at the tilting bout," said Walter Greaves.

"Well, I will tell you in a few words, for I really am getting drowsy. I met the old hag, and she gave me a drink. After that an amazing courage fired me ; I could have torn this lordly rival into a hundred fragments. But the tournament drew near ; so I saddled a favourite black steed called Ronald, furbished my armour, sharpened the edge of my spear, and proceeded to the rendezvous. It was no lie, Leila and her lover in dazzling array came together, and my old and only love was placed high above all that gay assemblage as arbiter of the combatants. Methought when I came near she would have swooned, all life and gaiety seemed banished from her. But soon the ranks were formed, and first of all I challenged my rival. He treated me with cold contempt, said he would choose his combatant ; still he could not bar my rank, for I, a yeoman's son, had title there to challenge any comer. I said he was a coward, and spat upon his armour."

"He would fight then, I trow," remarked his auditor.

"No, he would not ; so, mad with jealousy, I raised my axe, and smote his skull in twain."

"That was a coward's trick," replied young Greaves.

"Be not too bold, young man, or I shall smite your skull ; and yet I like a free outspoken guest. Just then a dark hideous form stood by my side, and a wild, shrill, unearthly sound of fiendish laughter rang through the air. Leila had swooned, while the assembly seemed all paralysed with terror. I fled before the cry of vengeance rose, and hoped to find in some secure abode a respite from my fears.

"But enough at present, for I am sleepy. Why I came here, how I have lived throughout these many years, shall be revealed to-morrow. So follow my example for a snooze."

The hermit laid down before the fire ; Master Greaves,

still seated, leaned against the hut side. The hermit was soon fast asleep and snoring ; young Greaves, watching his opportunity, glided noiselessly out of the hut, and then with more vigour than ever he had displayed before, left the island of Lindholme many leagues behind. Ultimately he reached Barnby-on-the-Don, spreading his adventures with the hermit all throughout that neighbourhood, which, with other marvellous tales of a like kind, were the theme of conversation for many years afterwards.

ON THE GRADUAL EXTINCTION OF VERMIN.

When I was a boy at home our little Yorkshire town was distinguished by two swine ringers, who remained in office twelve months, and afterwards, during the succeeding year, assumed the jurisdiction of chief constables for that parish ; they appointed their own deputies, which deputies, of course, did all the work and secured the emoluments. Those important functionaries also appointed their successors, who in turn became one year swine ringers and the next year chief constables. I remember asking my father, when he and our neighbour the druggist occupied that official position, why they were called swine ringers, since they appeared to have no employment in pig ringing. This is one of the offices, said he, the continuance of which has survived its duties. Many years ago there were no hedges, making separate enclosure of fields, but plenty of woods. The whole district might be divided into four parts ; there was so much plough-land, so much wood, so much *common* ; all the rest waste or bog. Every foot of ground was not then parcelled out and appropriated by individual freeholders. There was a *common right* ; that is to say, every native householder had free range for his horse or cow or pig. But pigs have an instinctive habit of rooting the soil up with their noses, often committing great destruction in this manner. To prevent this they must be rung, and it was the original prerogative of our office to see that no pig was introduced upon the common without one strong nail, at least, being firmly embedded in its nose. I suppose then that the practice of rooting would be attended with pain, thus counteracting the natural propensity of the animal.

This explanation seemed quite satisfactory, and the office was perpetuated time out of mind. In those days, however, swine ringers had nothing to do, so far as I could observe ; the real duties commenced on the

second year, when as constables they were responsible for the acts of their deputies.

But further—and this was a very curious feature—their jurisdiction was not confined to vagrant, refractory, and felonious bipeds, it extended also to those pests of the animal kingdom, which, according to parochial authorities, ought not to live. The rage against sparrows, polecats or fougarts, &c., became something fearful, and it was conducted on this wise, viz., by the payment of “head-money.” Every man, woman, and child was advised and encouraged to exterminate vermin. Those who brought sparrow heads to the chief constables, through the deputies, received for young sparrow heads a penny for four, or threepence per dozen; for adult sparrow heads a penny for two, or a halfpenny each, which money had to be repaid out of the poor-rate. I have seen scores, even hundreds of these trunkless birds counted out at a time—heads and ghastly necks exhibiting every phase of deadly agony. The greatest proportion of these birds would be shot in flocks or coveys, and afterwards decapitated: in their case the mutilation would be in unconsciousness. Still a considerable number of sparrows were caught alive in traps by juveniles, and had their heads literally pulled from the trunks while the poor frightened twitterers were fully sensitive to the torture. Now, independent of any economic features which such a case may present, the subject, in its moral aspects, merited a little consideration even at the hands of parish officials. To tear off the head of a sparrow, even after it is dead, can scarcely be said to have a humanizing tendency, especially upon youthful minds; but scragging them alive!—the practice is very bad indeed.

Although small and very common birds, a great deal might be written respecting sparrows. They devour the farmer's grain? Granted. But they also destroy grubs, especially caterpillars, and many insects. Well, then, it remains a simple question of arithmetic as to whether they do most good or harm. Some years ago the common practice was to shoot, poison, and kill all small birds inhabiting gardens; the consequence was that caterpillars and grubs devoured the vegetation, so that for the sake of a few cherries, peas, and now and

then a small piece of ripe apple, all kinds of produce suffered amazingly. We now know that this was very short-sighted policy.

There be many species of small birds which devour corn, and yet the local law of extermination was applied only to sparrows. Was this right? Are sparrows more voracious and more prolific than other birds? They are certainly pretty good peckers; moreover they seldom neglect their duties in the conjugal relations of life; but do they alone amongst birds merit the ban of extermination? Our old parochial authorities thought they did. Had some youthful Hampden brought a linnets or a goldfinch's head he would have got only his labour for his pains; while the tender of a poor little robin's "knowledge-box" might have awakened some pity and more indignation. But are sparrows vermin? This is a practical question which may apply to all localities and all times. Vermin!—we think not. What would Catullus have thought if any one had designated Lesbia's sparrow vermin? You have read "Ad Passerem Lesbiæ?" No! Then hear a translation made by the king of journalists:—

Little sparrow, gentle sparrow,
Whom my Lesbia loveth so;
Her sweet playmate, whom she petteth,
 And she letteth
To her bosom come and go.

Loving there to hold thee ever,
Her forefinger to thy bill,
Oft she pulleth and provoketh;
 And she mocketh,
Till you bite her harder still.

Then new beauty glistening o'er her,
Pain'd and blushing doth she feign
Some sweet play of love's excesses,
 And caresses
More to sooth or hide her pain.

Would thou wert my pretty birdie,
Plaything—playmate unto me,
Knowing when her loss doth grieve me,
 To relieve me,
For she seeks relief from thee.

But, after all, some crotchety individual may say—Your argument or apology will only apply in a partial, limited sense; without some restrictive enactments sparrows might multiply so fast that the grub eaters would preponderate over the grubs. Our reply is that should such a result happen in our day we might revive the old enactment of “head money.” Until then we may safely let them live, subject to the ordinary vicissitudes of starvation and sparrow-hawks.

And now let us notice the polecat, or fougart. Our parish constables bought the stinking carcase at the current price of sixpence, so that a dead fougart was accounted equal to twelve sparrow-heads.

That puzzles you, reader. Sixpence for a pole-cat! Why how can the pole-cat be regarded as a public pest? It is a carnivorous little animal, living in the woods; it does not eat the farmer's grain. Certainly not; but it makes sad havoc amongst his good dame's poultry; indeed its wantonly destructive powers know no bounds. A gentleman in Derbyshire says he found, one morning, eight ducks lying dead in an outhouse; when, presently, a fougart stole out of a corner, licking its lips, and looked up at the discomfited owner as “bold as brass.” He ought to have had a good terrier dog with him, you will say. It requires a very good dog to tackle the fougart. The vermin, when grabbed, will twist its lithe body, and inflict such a bite on the dog's nose or throat, that the latter is often compelled to lose its hold. A friend of mine writes:—“I remember once finding two very fine hens with perforated throats, and quite dead, while a third fowl was removed away bodily: this was, no doubt, the work of a fougart.” I rather differ with my friend respecting his conclusion. That a pole-cat, ferret, or stoat (and they are all one family) killed the two hens is quite evident, from the manner in which they were brained; but not one of these vermin could either eat up or carry off a good plump hen. There might be two or three fougarts employed in removing the cackler. There might; but still the conclusion is not very probable, because the fougart will seldom make a tour of this kind in company. During the night he will often travel many miles to a poultry-yard, or in search of field game; but he goes by

himself. True, I have read somewhere that pole-cats hunt in packs by the scent, like hounds ; but there are so many strange tales given in books of natural history, that it would not do to believe above a tithe. We will suppose for a moment that they feel excitement and real pleasure in the chase ; it remains far from evident that they will ever catch anything. How is it likely that they can keep up with a hare, or even a rabbit ?

Many years ago it was a practice in Yorkshire for people, with sticks and terrier dogs, to hunt fougarts by moonlight ; but I am afraid this practice was often made a pretext for more unlawful hunting ; and certainly, no game preserver now would like a band of men like these to beat through his preserves. But rural parishes do not now offer sixpence per carcase for every dead fougart. Still there are always two sides to a question. The fitchet-weasel, if suffered to remain unmolested, will destroy an incredible number of game. Every kind of weasel does this. Even the little common weasel, although it rids our corn-stacks and barns of mice by hundreds, and even thousands, will stand on no ceremony with a young chicken or tender duckling ; whilst in the coverts, where mice are scarce, it will brain a partridge, a young rabbit, or a leveret wherever it can find one. But as to stoats and fougarts, when game is plentiful, they commit the most wanton destruction. Look at the fitchet-weasel, he advances stealthily, leaping or bounding through the cover with such alacrity, seizing his prey almost before any danger is apprehended. Moreover, he is a bold and pugnacious little brute. There he is, clinging to the throat of a victim strong enough to run off with him a considerable distance : but the keen little blood sucker never quits his hold until the hare lies quivering upon the ground. Talk about sucking, all the weasel tribes show a remarkable propensity for eggs ; thus doing incalculable mischief to the unprotected pheasant or partridge nest. Well might our forefathers strive to be delivered from pole-cats. The fox is no small depredator, but (putting out of question the matter of eggs) where one head of game is eaten by a fox scores are destroyed by pole-cats. O, the mischief these vermin do to game !

Here I will pause, for the reader is nestling with impatience to launch forth his objection. What is it?

"Well, I don't see any reason why the poor-rate should suffer for pole-cats."

My dear sir, I was speaking of a local custom abolished twenty years ago or more. And yet at a time when vermin abounded, there was a show of reason for the custom. Is it not a duty on the part of parish officers to protect the hen-roost, since to a great extent the price of poultry depends upon the supply?

"So far so good; but, in the matter of game, what have the public to do with protecting gentlemen's preserves? Let game owners protect their own preserves."

And so they would if the fowmart hunters will let them alone. Gamekeepers know best how to exterminate vermin; they do it quietly but effectually. Year by year fowmarts are fast diminishing, and during the next generation, it may be, a pole-cat will almost be as rare a sight as a Bengal tiger.

There are various species of vermin closely allied to weasels, which are, in Yorkshire at least, now almost extinct. Such, for instance, are the martens (stone and pine), animals seldom to be met with, but ferocious and destructive wherever found. The ferret is of African origin, and only known in England by domestication: with us, therefore, ferrets are trained, and made obedient to the keeper's will.

We will reserve some other kind of vermin for another chapter.

BADGERS.

Badger hunting was formerly quite a favourite Yorkshire recreation. Some of us can remember the time when badgers, like bears, were kept entirely for sport, that is to say, for baiting. This custom has long since passed away, partly, no doubt, because the vermin is now rarely to be found, and partly because popular tastes and habits have altered during the last fifty or a hundred years. The dictum of the present age is this—worrying animals for the mere purpose of sport is brutal and demoralising.

"Exactly," says Mr. Spicy Sleak, "my feelings would revolt at such a sanguinary spectacle ; indeed, I should faint."

"Bosh !" exclaims Mr. Sturdy Blunt, "vermin were made to be worried."

"It's neither all true nor all false," replies Mr. Ephraim Epps, "the dictum wants sifting."

No doubt of it, Mr. Epps, the dictum wants sifting. We live in a free country, where every man is at liberty to express his own particular views respecting any question affecting either himself or the community at large. It is not to say because the majority in England think one way that the dictum is necessarily infallible. Certainly not ; therefore you, Sturdy Blunt, and you Ephraim Epps, may show forth your opinions.

I don't know how it may be with you, reader, but when any knotty matter throws me into a "brown study," I am almost sure to be pestered with ghosts. It's true. There riseth up in my solitary room a number of talking apparitions, who develope all the mental attributes, and seem actuated by all the varying influences of common humanity, so that I myself appear to be merely the spectator of an animated debate. These ghostly visitors do not drink your wine, or smoke your cigars, but for all purposes of argument there they are in *propria personæ*, No. 1, No. 2, and No. 3, all profoundly interested in Natural History. They fall into discourse :—

No. 1.—Badgers—that is the subject we have to deal with. Why do you kill them ?

No. 2.—For the same reason that we kill pole-cats and other vermin. The founmart makes free with a

partridge or tender chicken, which was intended for his betters ; the badger destroys many a nest of game ; also young hares.

No. 3.—That sounds to sense. Every quadruped, fowl, or fish, which does not minister to our use or gratification has no business to live. We are the lords of creation.

No. 2.—Yes, we are the “lords of creation,” but must we, therefore, look upon inferior things simply as food for the belly ? I think not. If it were not for exercise in the open air where would be the use of a good dinner ? To gain an appetite or aid digestion there is nothing like a chase through the fields and woods. But to get men out into the fields and woods there must be some object of pursuit ; then the whole powers of the body and mind are stimulated into action.

No. 1.—It's cruel—hunting animals until their hearts are fit to burst, and all for the mere diversion or lusty exercise of man.

No. 2.—All blarney ! Do not animals hunt one another ; and is there any more cruelty in following at the tail of a trained pack or couple of dogs, than in permitting them to follow their instincts unobserved ?

No. 1.—It's my opinion that vermin, as you call them, in a natural state, are least of all objects of prey. What predatory animals would feast upon a fox or a badger (which is at best but a tough and rancid morsel) when they might have a sheep or a fawn for the catching ? I do not pretend to say what use they are upon the earth, but here they are, or rather were.

No. 2.—They were intended for sport to the sons of Nimrod. As in the human so in the animal kingdom, such as are pests to society must be persecuted, or prosecuted, for that is the truer word. A farmer loses fat ducks and chickens, but by-and-by he finds out that a fox, or some fowmarts did the mischief. Does the owner sit quietly down with benignant feelings and say—Ah, well, hunger is a sharp thorn ; and they, poor creatures, are welcome to whatever they can pick up. Does he ?

No. 1.—Of course not. But why give unnecessary pain to any of God's creatures. He may shoot them, or kill them off quickly with dogs, but not nurture and preserve them for purposes of sport.

No. 2.—It vexes me to hear any individual talk like a — ninney. You might never have seen or heard of a badger before. Is he not stealthy and cunning as a fox? Is he not difficult to track without the aid of trained dogs? And when found does he not bite like the — old gentleman himself? He does, I think. Who would leave their beds and wander half the night long in pursuit of these vermin if the sense of duty was not quickened by the zest for diversion?

[Unfortunately just at this moment I must put in my “verdite” (alias verdict), and bawl out—yes, but once it was the custom to trap these animals and keep them for purposes of baiting. This broke the spell, and when I looked round all my ghostly visitors had suddenly vanished—vanished into the air.]

Reader, did you ever see a real live badger? No. Then you would, perhaps, wish to learn something respecting its nature and habits. Its teeth are more adapted for crushing vegetables than tearing flesh; still the animal is by no means particular in its diet. It takes kindly enough to roots, and various kind of fruit; but it will eat rabbits or poultry, when it can get them, and makes sad havoc with the eggs, and young of partridges. I have heard of badgers eating lambs; but, certainly, they have a sweet tooth in their head, and could not pass a hive of bees if their life depended upon it. Their life, however, is in no particular danger from these insects, for their hide being tough and their hair long, bees cannot harm them; so over goes the hive, and the creature eats as much honey as would sicken half a dozen folks.

The badger is a night prowler, sleeping all day long in its burrow, and only coming forth to feed at night. When snow is on the ground the cunning beast will not come out at all, since then, in all probability, his footsteps would be tracked; but whether or not he remains torpid through a great part of winter is even now a question in dispute. His burrow has but one opening at the surface, both for ingress and egress, but it is divided into several tortuous compartments, so that it is difficult to dig the animal out; but if you ever come to a round hole lined with hay or dried grass, ten to one but the brute will be there, rolled up and fast asleep.

In some countries the badger is dressed for the table. Mr. Bell mentions having seen dozens of skinned badgers in China, hanging in the shambles for human food ; indeed, the hind quarters salted and dried are said to make capital hams. Ugh ! I could not fancy them ; the smell is enough for me. You are perhaps aware that this animal, like the civet cat, exudes a secretion which is very odorous ; but the quality of scent more resembles that of a moufette than a civet cat, i.e., it stinks.

The badger is quiet and harmless if left to itself, but will fight like a Trojan when attacked. In baiting it is often more than a match for half-a-dozen powerful dogs, supposing that only one of the latter was let loose at a time, for its skin, though tough, is what Dandy Jones calls "limack : " when seized in any part, it curls its head and bites. Bites ! Yes, so that the strongest hound will rarely shake him off ; simply because no known animal has such a strength of jaw. Of course, when a dog is in this predicament, a second and perhaps a third is set on, when the badger's mouth cannot be in two places at once. But there are the claws—four feet, and each foot has five claws ; these if not so sharp as a tiger's are almost as strong. When fairly surrounded, the badger generally contrives to lie down upon his back, and goes at it "tooth and nail" while a particle of life exists.

Hunting the badger is a somewhat novel and yet exciting sport. As the animal seldom leaves his den until towards midnight, the "meet" has a tinge of the supernatural, and seems scarcely "canny." Observe the programme—

SCENE.—*A tangled Copse on the Hill-side, Bordering on a great dark Wood.*

TIME.—*Four o'clock, a.m.*

The night is fine and clear, with just sufficient light to discern objects floating in thin air, without exactly determining their character. A deep silence reigns around, broken at intervals by the hooting of an owl, or the dismal croak of the raven, until at length the good dogs are fairly on the "slot" of the badger, when the

air rings with the music of the pack. Still the huntsman can scarcely distinguish his hounds as he cheers them on, but follows the "trail" as much by sound as sight, in the pale gleams of a waning moon.

I once saw a fine stuffed badger which had been caught alive by a single woodman, without the aid of either dog or gun. How did he catch it? In this way. Having observed in the daytime a couple of badger holes in a certain wood, he did—what? Dig the animal out, you will say. Nothing of the kind; for he might have thrown up a score tons of earth, circumnavigated more than one hard tree root, and not got at the beast after all. Charley Smith knew better than to waste so much labour. He waited until long after midnight, and then took a lantern, a sack and some ropes into the wood. Charley inferred, and as it turned out rightly, that the badgers would be abroad eating their evening meal. Arriving at the spot, he prepared his tackle, the sack, having a string round the opening like the string of a purse, was thrust into the burrow, the mouth of the bag being propped open by a hoop; then, taking the two long strings into his hands, Charley ascended the nearest tree, and waited until Mr. Badger thought proper to return home. If I remember rightly he watched and waited up in that tree for nearly three hours; so long, indeed, that he began to think the badger must either have taken fresh lodgings or remained fast asleep in his bed. It required some patience to sit perched up all that time, solitary and yet not alone, for squirrels climbed the neighbouring boughs, and a hawk or some other bird, careering in search of food flapped its wings within a few yards of the spot. At length the woodman could dimly trace a large animal proceeding at an easy trot. It stopped, then sniffed the ground, walking round and round up to the very tree where Charley was. An enemy had been there, might be still concealed in the neighbourhood, and the badger's suspicions being fairly awakened, the question would arise as to whether it should stay or fly. After some further reconnoitering the careful brute bolted into his hole, as he thought, but the jerk proved that it was only into a sack; the woodman pulled the strings tightly, thus enclosing his victim, and then descended to secure

it. No doubt this big beast would struggle violently, and try to bite through the sack. But it was all in vain. Charley shouldered his prize, and bore it home in triumph, where, afterwards, it was baited with the best dogs in the neighborhood. Many years have passed away since this took place.

FOXES.

Two or three weeks ago I listened to a thrilling and profitable lecture on "The Lights and Shadows of our Social Progress." The manly orator glanced at "field-sports," showing how hunting is one prime characteristic of a country gentleman (in marked contrast to that passion for gambling so common among our continental neighbours), a pastime very commendable, but—"not to be lived for." True, life has purposes nobler, because more important, than hunting. Not unheeding a personal moral discipline, and graduation for the future state, there are primary social duties which demand from the humblest and the highest a special cognizance. No man can neglect these and be blameless. Hunting is a pastime rather than a duty, and yet the pastime has developed many features of our national character. Excepting the Scotch, and they are near of kin, as models of physical beauty where, in all the world, shall we equal our English country gentleman? And yet in how many cases do we find that these men seem to live only for the pastime. But their pastime develops—what? A courage which in deadly strife or civil action might be directed to national and noble purposes—a perseverance and untiring energy which courts bold enterprise—a hope and exultation (in the "view-halloo" and "death") which engenders social enthusiasm, developing social respect while it promotes good fellowship.

But to enjoy the sport of hunting there must be foxes. It is a marvel of this day, in a county like Yorkshire, with a biped population filling all the ground, amidst the smoke of coal mines and the noise of manufacture, that a snug retreat should still be found for foxes. Other kinds of vermin have either totally disappeared or are gradually becoming extinct; foxes remain. Can we give any satisfactory reason for this? I think we can. It is because the comfort and increase of foxes are strictly preserved. We hear of landlords who give their keepers a bonus for every fox-cub which is reared on their estates. No matter what destruction accrues to the hen roost or the farm-yard the "Reynard family" must be protected. In general the fox has a stomach above partridge and small ground game; she likes a good plump hen or duck. Even the goose is not an un-

gainly bird—too much for one ; she can polish a goose nicely. True, where there is a family, Mother Fox will let—

“The little ones pick the bones O.”

Unlike bipeds and other large animals, the fox does not get his three or four meals per diem regularly ; so that when an opportunity of feeding presents itself he lays in a pretty good stock. Farmyards in the neighbourhood of woods are most subject to depredations. Reynard occupies a snug den in the wood, which may be one of his own making, or may be the forsaken hole of a badger. Anyhow there he is, and to him no music can be so sweet as the cackling and crowing of poultry. True the simple duck-note and the gabble of geese are listened to with pleasure ; even the bleating of young lambs proves an acceptable sound. At midnight, when all the farmer's household is asleep, sire fox starts from his den, and listens if any biped or canine watchers are about. All's serene ; there is not, it may be, a sound stirring, save the solitary caw of some awakened rook, or the distant hooting of a night-bird : these are unregarded. Reynard creeps slyly from the covert, crouching by the hedge-rows to where he scents his prey. Just then some sleeping hare wakes to devouring fright. A matron partridge, crouching o'er her young, proves a sweet mouthful. The cunning brute will liberate a rabbit from the snare and feast upon him. What mean those feathers scattered here and there around the fowler's net ? Our fox has got the birds. But these are merely “snacks ;” he banquets on the hen-roost. He can get in, do not fear. However high the wall, he will scale it ; however strong the barricade, he will invent some cunning mode to gain an ingress. There, see, he lifts a tile or two, and down he springs amidst his fluttering prey—a dozen hens and cock. Numbers of these will save themselves by flight, but four or five are killed. Then what does Reynard do ? He takes a hen and hides it in a bramble ; returns, and finding one uncommon fat cannot resist the desire to eat it there and then. The rest are carried off successively and hidden in various places ; but master fox will not forget a spot. Enough for one night, so Reynard seeks his den. He scampers home. But, caution ! What is that, placed right in

front of his hole? Really and truly there are only two pieces of peeled white sticks, planted crossways. They were not there when he left home, and he has taken too much plunder himself not to know the nature of a snare. O, O! says he to himself, they won't catch a fox asleep; I'll nestle under that furze-bush for the night, and investigate this matter in the morning. But little did he reckon what would happen on the morrow. An earth-stopper, who had cognizance of the fox's domicile, had been sent into the wood that night, preparatory to the "meet" next day. This man was almost as "cunning as a fox." Had he filled up the den's mouth with a few shovel's full of earth it might easily have been scraped away; had he mixed thorns and earth together—a common practice at one time—thorns would make the clearing out a little more difficult, and that would be all; suspicion would scarcely have been awakened.

Morning at length dawns, one of those rare, bright January mornings unaccompanied either by frost or rain. Two score equestrians, led by a noble master, and headed by the "pack" approach cover. The hounds are thrown in, a whipper-in standing on each side to keep them from straggling. Whisht! the less noise sportsmen make here the better. Of course Reynard is scented under the furze-bush, and finding his position untenable he bolts. And now a great deal depends upon the huntsman as to whether it will be a good or bad "find." The scent is first-rate, therefore, Tallyho! Hey, Carlo! and Cyrus! hark forward!—good dogs! Sometimes, when first started, a fox will run short, particularly where there is an opportunity of concealing himself; then, if he gets to earth Reynard may be considered lost, since, in nine cases out of ten, it will be impossible to dig him out. You cannot tell from the opening how far, and under how many knotty tree roots his hole may extend. At one time terrier dogs, each armed with a collar and bells, were trained to enter these holes. It was not intended that the terrier should grapple with a fox in its hole, but the dog's bark directed the huntsman where to dig, while Reynard was kept from shifting his position during the operation.

Ah! here was the danger—our hounds have been

carried beyond the scent. And now Cyrus and Carlo and Styx exhibit signs of being at fault. A little encouragement will do good, for hounds like men need prompting to duty. If their interest is not kept up by a few cheerful words of encouragement the hounds will speedily grow careless. But our fox has evidently got to earth and now he knows the game no huntsman will be able to draw him forth this day.

Here we will pause, for the reader has been for some time nestling about, and making very wry faces : he evidently wants to ask a personal question. Ask what you will.

“Are you an old experienced foxhunter?”

My dear sir, practically, I am the merest tyro in the art.

“I thought as much.”

“Yes, your narrator is a very novice ; could not take a five-barred-gate, or even a moderately high fence without breaking his neck, or fracturing a limb at the very least ; but, with a hearty appreciation of the sport, I have always felt pleasure in picking up odd bits of information from the initiated, and must crave pardon for any errors of phrase or fact, which an experienced foxhunter would, from his superior knowledge avoid.

But, hark ! there is a shout in the distance, and what a chatter that ominous magpie trio does keep up. And see, Ajax and those straggling hounds to windward have caught the scent, and peel forth welome music. A fresh fox, not relishing near him all those sniffing noses makes a bolt. And now, Mr. Huntsman, you must mind the foremost hounds do not slip down the wind and get out of hearing. Hark forward, tantivy ! Zounds ! it is a noble sight, enough to make even the hypocondriac feel manly. And, for one short hour, what is there upon earth that can exceed the foxhunter's joy ? Carking money cares, eating out the vitals of genial life, the thirst for office, the desire to rule, and be distinguished among men—what are these passions, even when crowned with success ? Not worth that hour's beatitude of muscular enjoyment. In the hunting-field a spirit of emulation is peculiarly noble. Do we not find envious, jealous enmities surging out of political, literary, aye, and even religious coteries ?—

and there are no feelings of the human heart so bitter as these. Everywhere we see them—except on the hunting-field; here they are forgotten, and, it may be, purged out.

A cynical reader, with no taste for field-sports, tells us that we are letting our enthusiasm go far beyond the truth: in his opinion fox-hunting is a most dangerous, cruel, uncomfortable and selfish game. Let us take each objection *seriatim*. How is it selfish? Why, since falconry is dead fox-hunting is about the only field-sport where one can enjoy the companionship of the fair-sex. Never mind, my dear sir, whether or not you would like a fox-hunting wife: so long as she does not leave you at home to nurse the baby, never mind. There are times and seasons for everything, and many a good wife has come out of the hunting-field; the courage which she there acquired may be nobly applied in emergencies of domestic life. The softer, milder traits, are what you most admire in woman? Very proper, too, since these qualities are necessary to temper your surliness. Still, you say it is selfish, in this manner—a comrade gets a fall, which dislocates his collar bone, or breaks his leg. No one stays to pick him up, or pour a word of comfort in his ear; the hounds are in full cry, and neck or nothing, all strive to be in at the death. But let the hunt finish; then see what help and sympathy a comrade gains.

That the sport is dangerous to craven hearts we must admit; also that it is somewhat uncomfortable to some people on a wet day. But how is it cruel? Surely no one will harbour much sympathy for the fox? Assuredly he who has suffered in hen-roost will not. And then, as we frequently hear observed, the dogs like it, the horses like it, and the men like it. Your objection is over-ruled.

Our fox must be very "strong on the legs," since he has led a gallant race for upwards of an hour. There, now he doubles and evidently means getting to ground in Tunswell Wood; but he is headed, and five minutes afterwards killed, so that there is one fox less left in the world.

The Iron Sinews of Yorkshire.

A FEW GENERAL REMARKS.

What a fearful thing it would be if there was no iron and no coal ! What should we do for fuel ; how could we replace the ten thousand necessary appliances of life ; how should we find employment for our teeming population ? Consider a moment, what branch of trade or manufacture is there which depends not directly or indirectly upon iron and coal ? And yet, possibly, there may come a time when iron and coal are exhausted. But let us cherish hope ; the Omnipotent Designer's plans were perfect from the beginning ; they can never stultify themselves. The condition of life in future ages will always find adequate resources constantly developing.

The man of science shakes his head, saying I can demonstrate to a certainty that coal will become extinct, and soon. Look here,—for it is a simple question of arithmetic,—the coal fields of Great Britain are as one to every thirty miles of surface land. In America the estimation is one in fifteen. In France one in two hundred. It would thus appear that, before mining operations commenced, the British Isles possessed about 142 *billion* tons of coal ; France about 59, and Belgium about 36 *billion* tons. So far as relates to Great Britain much of this liberal store has been got and consumed. It is estimated that 62 *billion* tons have already been raised ; so that we have only about 80 billions left. At present this consumption from British coal fields is at the rate of about 90 million tons a year, and annually increasing. But taking the present rate of consumption our supply will totally and inevitably cease in about 250 years.

If these figures be true (and who can controvert them ?), the question of a future supply of fuel (and, as a consequence, the means of smelting ore), is becoming one of serious importance. “Coal will last my time,” says one ; “let future generations shift for themselves.” Scientific men, with a little more philanthropy, ask

Government to pass measures checking all needless expenditure of coal. It is to be feared that, on this matter, legislative enactments would do very little good. But it is high time the ingenuity of man was awakened to produce light and heat on a larger scale by chemical appliances from other substances than coal, and thus supplement our diminishing supply of fuel.

But let us look at the subject from another point of view. No essential element of matter is lost. Annually so many million tons of coal pass away in smoke. What becomes of this smoke? It would appear that the carbon in coal, after being liberated nourishes new forests, which in process of time fall, or become submerged, and thus fresh coal-fields are reproduced. Take as an illustration the great Level of Hatfield Chase, and Thorne turf moors in particular. Here there is a surface track of decayed vegetable matter, miles in extent, ranging from one to twelve feet thick. Now we have only to assume a succession of deluges over these moors, leaving vast deposits of mud and sand at every subsidence, when the superincumbent pressure of the upper layers, and chemical action would solidify this vegetable mass, thus producing coal. But how long a period must transpire before such a result could be brought to pass? It is impossible to give any reliable data, because those violent convulsions of our globe, and consequent change in the relative position of land and water, cannot be ascertained with chronological precision. At a rough guess we should infer that Thorne Turf Moors would become coal in about a hundred thousand years. Unfortunately we cannot afford to wait all this time; the glory of our manufactures will be extinguished before then.

We read of smoke being the food of plants: an undue proportion of anything, however, is injurious, and in this West-Riding of Yorkshire it would appear as if we were poisoning vegetation by too much of that which sustains vegetable life. *

* I had not full confidence in the philosophy of these remarks, and therefore wrote for information to a medical friend, who has the reputation of being "well up in chemistry." The following is his reply:—

"CONCERNING SMOKE.—The reasons why plants do not flourish in the neighbourhood of smoky chimneys are these—

Ah ! says one, this shows how necessary it is that furnaces should consume their own smoke. It may show quite the reverse, for is it not possible that by consuming the smoke you may intensify the evil ? No essential element of matter is lost, and many of those so called improvements are only laboratories of poison. No man will be poisoned by a mouthful of honest smoke, but he may be injured by an insidious etherialised vapour. Twist the question as we may, the fact remains that not a particle of matter is lost, so that this immense gaseous expansion, artificially liberated from coal, is playing some important part in the physical economy of our globe.

There was a time in the history of man when this immense mineral wealth—coal and metallic ore—lay unappreciated in the bowels of the earth. How did the ancients first get the idea of smelting ore ? As well may you ask me how they were led to frame speech into a language, so that each other one could understand his and her thoughts. We will receive the record as true that “in the beginning” there was but one man, and afterwards one woman. No doubt but that a dæmon school-master was sent expressly to teach our first parents that groundwork of all progress, the denomination of words. It is just possible that the nature and application of

First, the atmosphere is thick, and they do not get enough sunlight. Secondly, there is a deposit of particles of carbon on the two surfaces of the leaves, which fills up their pores and prevents them breathing oxygen gas, the same as if our lungs were choked up. Some of the insect tribes, if not all, breathe like plants through their skin, having no lungs, and to cover them with oil or varnish suffocates them. Thirdly, besides the gases useful to vegetable life, chimneys emit others which are injurious, viz.—large quantities of ammonia, carburetted hydrogen, with other compounds of carbon and sulphur. The plants are poisoned as well as suffocated. It is at first sight singular that the artificial decomposition of vegetation (*i. e.* coal) should be hurtful, whilst it is so fertilising when produced by sunlight and air under natural conditions. The explanation I give is that the high temperature of a furnace-heat resolves the matter into unwholesome combinations, besides liberating such volumes of unconsumed carbon in the form of smoke.”

This congealed smoke, encasing the leaves was what Earl Fitzwilliam lately directed attention to in the shrubberies of Mr. Brown, of Rossington, and which his lordship not unnaturally supposed had travelled from Sheffield, a distance exceeding twenty miles.

minerals may have been found out by accident. One of those ancient men perhaps saw a little molten stream running out of the fire, which, cooling, became a hard and solid mass, capable of breaking sticks. He would naturally conclude, first, that it was melted from some common material which he had heaped upon the fire, and, secondly, that it might be fashioned while in a molten state into any practical instrument which he could desire. And thus in respect to coal, it might accidentally have been discovered that a certain black earthy matter would sustain flame and produce heat. But, one may ask, how did man first get the idea and means of kindling a fire, for the combination of steel, flint, and tinder, is comparatively of recent date? Even the method of rubbing two sticks together—that ancient appliance of savage tribes—is based upon the knowledge that sticks contain caloric, and that friction will produce flame. Alas! curious reader, we seem to find as much mystery in tracing the origin of many common customs as we meet with in investigating the nature of things *per se*. Why do we not content ourselves with one sufficient fact, that the Divine Being uses all creation as an instrument to carry on his vast designs!

In the early age there lived a man called Jubal, and God had put some music in his soul. He could hear spirit-tones murmuring through the trees, a chorus in the dashing waterfall; and when the sea was troubled he would listen, rapt with the deep, majestic symphony. His half-brother, Tubal-cain (a cunning man), had learnt the use of metals; and thus, through many happy years they worked together, combining art and music; Jubal became “the father of all such as handle the harp and organ,” and Tubal-cain was an “instructor of every artificer in brass and iron.” A specimen, or even a diagram of those earliest musical instruments, or works in metal, would have a special interest for us now. Certainly they would excite surprise, and, it may be, contempt; still, when men lived to an immense age, with fewer purposes to distract their attention, those long years of labour would surely present some remarkable result.

We cannot stay to glance at the working of metal when Babylon and Ninevah were in their glory, but

must restrict these feeble researches to our own isles. It is now matter of dispute whether or not the ancient Britons knew the use of coal as fuel. Numerous blocks of coal, collected for some purpose, have been found below the Roman roads, and in other places, associated with remains evidently British. The most probable inference is, that these fragments of coal were intended for being worked into personal ornaments. But could the old inhabitants produce metals? Had they any iron? Some point to those early stone axes, and arrow-heads of flint as proof that the ancient Britons did not know the use of iron. But this argument is not quite conclusive, inasmuch as it might be urged that those implements of stone would be common simply because they were more easily procured. It is difficult to imagine, also, how ever these could be fashioned without the use of metal tools.

The neighbourhood of Malton, in this county, is rich in British and Roman remains. These have been exposed on several occasions by railway cuttings during the last sixteen years—here a large British stone cairn, there a Roman encampment, yonder a tumulus. Around the encampments are scattered immense quantities of animal bones, fragments of pottery and domestic utensils, a few iron arrow heads and Roman coins. In the Roman tumuli, besides the human body, not yet mouldered away, one or two splendid urns of Roman pottery were discovered, and on two occasions a copper coin. In the centre of these British barrows human remains have been found, in one place associated with a rude urn, and some flint instruments, in another with a bone pin, but never, so far as our knowledge extends, have these memorials of British art contained any instruments or ornaments the product of metals. It has been contended that iron was so valuable as to be used for currency, according to weight. Cæsar, whose observations of this country were no doubt accurate, so far as they extended, says :—“They (the Britons) use brass money, and iron rings of a certified weight. The provinces remote from the sea produce tin, and those upon the coast iron; but the latter in small quantities. All their brass is imported.” We must bear in mind, however, that, before this time, the Phœnician mer-

chants had brought their treasures to barter for our tin, lead, &c. Nor must we forget that the intercourse between the British Isles and Gaul, consequent upon the Druid institutions, was very intimate, so that it will not be irrational to conclude that the two countries, in respect to art possessions, would closely resemble each other. That these Roman soldiers were not only better disciplined but better accoutred for war, is abundantly evident. The invading cohorts had small but sharp and well-tempered swords, not much unlike a Turkish scimiter. They came also with buckler, shield, and helmet. All of metal? No, formed of wood, and usually covered with skins or leather. Some of these shields were encased with thin iron plates, while others had rings of iron binding them together. Soldiers of rank wore the lorica or cuirass, a coat of mail made of leather and covered with iron plates or rings twisted round each other, the latter being a primitive chain-armour. Thus equipped they advanced with slings (leaden balls being frequently used), javelins, and their sharp-pointed scimiters. The Gauls used only a long heavy sword, which required both hands to wield, and plenty of room. These swords were of so bad a temper as to be soon bent against the Roman bucklers, and often their owners were slain before they had time to straighten them with the foot.

That our Roman victors practiced the smelting of metals in this country is evident from the existence of numerous beds of cinders in which Roman coins and instruments are found. These ancient remains are restricted to our mineral counties, being mostly observable near the forest of Dean, or Arden, as it was originally termed.

In the ninth century we find a grant of land made by the Abbey of Peterborough, which amounts to a transfer for certain considerations, namely—one night's entertainment of the monks (no mean item), ten vessels of Welsh and two of common ale, sixty cart loads of wood, and twelve of pit coal. This shews that the practice of mining, which necessitates the use of iron instruments, was somewhat advanced. After the Norman Conquest, heavy armour and weapons of steel called in requisition much labour and skill in the working of metals. Every man of rank kept his own smith, who

took charge of his arms and accoutrements. But, perhaps, the first great impetus was given to mining and smelting operations during the reign of Henry III. There is a patent roll of this monarch extant entitled, "De Forgeis Cevandis in foresta de Dean." Also a charter dated 1272, giving the inhabitants of Newcastle license to dig coal.

SMEETING THE ORE.

For smelting purposes it must be of special importance that furnaces should be erected where there is plenty of ironstone and abundance of coal. An important item of carriage is saved when all the materials can be dug from the neighbouring hill and valley, instead of having to convey them forty miles, or more. Excepting the counties of Staffordshire and Durham, no district in England combines these advantages to so great an extent as the West (and that extreme portion of the North) Riding of Yorkshire. For proof of this superiority we need but point to the immense undertakings at Bowling and Low Moor. And yet this West Riding is more famed for its coal-mines than its ironstone. Perhaps, even now, however, we but partially appreciate the mineral wealth of our hills and dales. Just across the Trent, near the boundaries of this county, there is a vast field of ironstone, most excellent in quality. Ten years ago nobody knew of it; neither scientific men nor landed proprietors ever suspected the existence of this mineral wealth. Verily until our eyes are opened we may walk daily upon a mountain of gold, and say—Pooh! it is naught! Afterwards, when the secret is discovered, knowing men take advantage of their neighbour's ignorance.* I believe this ore is brought, *via*

* The Court of Equity, it appears, will protect a man from mistake, even when the act amounts to a legal transfer of his property. We have a case in point, relating to the locality in question. A small proprietor sells a portion of his land, in ignorance of its value; the buyer knew that it contained ironstone, the seller did not. After the estate had been paid for and properly conveyed, the man who was over-reached takes his case before the High Court of Chancery, and obtains a decree to nullify the bargain.

Thorne and Doncaster, to our principal ironworks at moderate rates of freight, since the immense mineral trains which carry down South Yorkshire coal, to be shipped at Keadby, may as well bring this stone back as return empty. As might be expected, smelting furnaces are now being erected on this Lincolnshire side of the Trent where the ironstone lays ; and it is easy to predict that, in twenty years time, a large manufacturing population will drive away the sheep from those quiet hills. It will be of increased advantage if new coal-fields should be opened out in the immediate neighbourhood of this ironstone. But our province is in Yorkshire, and we shall confine this survey to the vast and extending manufactures around Rotherham and Sheffield. We leave the railway train at Rawmarsh Station, and advance up a gentle acclivity to Park-gate, names significant of a bygone age, when the adjacent Don, by frequent inundations, made the low land into a perfect marsh, and when the site of these ironworks was really the gate of Aldwarke Park. Even now the works might be considered inconveniently near to Aldwarke Hall and grounds, were the gentle proprietor fastidious on the question of smoke. But Mr. Foljambe is too sensible and philanthropic a man to oppose the progress of local industry and national wealth. There is a score of black square funnels emitting fierce columns of flame, with half a dozen chimneys of larger girth and altitude, pouring out now dense clouds, and anon thin streamlets of smoke. Here, at Park-gate, smelting of ore is not the sole, or even the principal branch of trade ; armour plates, locomotive rails, boiler-plates, bar and hoop-iron, castings, &c., form altogether an immense product of manufacture. But what is that great cone of brickwork with a parapet round the top ? It can be nothing else than a smelting furnace, and to this spot we will first direct our attention.

There is a quietness here, which contrasts visibly with the ceaseless whirl of machinery, and the rapid, orderly motions of a thousand hands under the neighbouring sheds. Here two or three men were silently making grooves in a floor of sand. Two or three men had squeezed themselves into a little cabin, and were silently enjoying their "baccay." Two or three carts

were shooting loads of brown heavy earth into a convenient heap. It did not strike me at first that this was the veritable ore. And yet it looked not at all like furnace-sand. Taking a little in hand I enquired of the carter—

“What is this for?”

“Why, its for to make pig on.”

“Ha,” said I, “this is ironstone!”

“You’ve got it now,” said he.

A grisly head then protruded from the cabin’s narrow doorway. The head made no remark, but a wreath of smoke curled round a short black pipe. Close by stood the hoist, and I noticed that its floor or cradle contained a barrow of this ironstone and a barrow of coke. A smaller barrow or truck stood near, filled with limestone, and another filled with what looked like foundry dross, but which I afterwards learnt was composed of metal retrieved from the waste-heaps, and intended for a second smelting. I asked the grisly head if he was foreman over this furnace. “Noa,” said he, “John Cross is th’keeper,” and just at this moment that powerfully-moulded individual made his appearance. Having satisfied him that my visit was perfectly legitimate, and also that I had obtained authority for prying, sturdy John Cross, or cross John asked if we were going to put up some furnaces!

“No,” said I, “but if you are not careful of your speech I shall put you into a book.”

“I see; yau’re wun o’ them London chaps.”

“Mr. Sanderson (the general manager) has just warn’d me not to run away with one of the big engines, as they have so much work for them to do at present.”

Big John laughed furiously.

I expressed surprise that the ironstone was not kiln-dried before being put into the furnace.

John winked at the grisly head in the cabin doorway.

I enquired what proportions of stone and fuel were used.

“Fetch him th’ book:” this was John’s command; whereupon the regular journal was thrust through the cabin door. From this it appears that a “charge” consists of ironstone 20 cwt., coal 5 cwt., coke 3 cwt. 1 qr., lime 1 cwt., and 4 cwt. of melted cinder, which charges

are repeated (if I remember rightly) about every hour. Presently a hand began to use a lever, when I found that the hoist was worked by hydraulic power. A man, who was going up with the charge, invited me to accompany him ; then I could see how the stuff was poured in through little side doors from the barricade, near the crater's mouth. The very invitation awakened curiosity. If one could but look down this huge, roaring cauldron, what sight would the inside present ? Perhaps its contents would seem like a bubbling mess, the froth (*i.e.*, dross) at the top, with liquid ore, a pool of molten fire underneath. Perhaps I should see nothing, but only get stifled with smoke. Aye, there's the rub !

"You'd better get in," said the man ; and he stepped into the cradle himself by way of example.

"No, thank you ; it is better to understand the process without mounting to the top ; such, at least, is my opinion."

"May'be ye're asthmatical ? There's no danger, for, d'ont you see, the gang-way is a good bit below the smoke."

Evidently it was so ; still I declined to ascend. There is nothing like *terra-firma*.

As the hoist was ascending I turned to John Cross. "You do not light this furnace every day ?" I enquired. John said they did'nt. So far as his knowledge extended, the furnace had never been blown out, night nor day, nor Sunday, for six years, except for a few minutes at a time, while they were casting, *i.e.*, running off the metal ; the blast never ceased all the year round. Then what becomes of the dross, I enquired, does the furnace never want cleaning out ? John said it never did ; because the dross was constantly oosing out in a melted state, which I should view presently. This brought to mind how I had seen the turnpike roads mended with a streaky, glossy material, like glazed earthenware : it was furnace dross.

But how was the blast obtained ? For an explanation of this process I was referred to the engine-tender ; and he very readily volunteered information. Two steam engines are employed to pump air into a vast cylinder or receiving box, thence through underground pipes to the smelting furnace. Before this blast reaches

the latter, however, it is heated, for those currents, however compressed and propelled, contain moisture, and moisture not only deadens flame, but deteriorates the metal. Those hot-air ovens have the appearance of an immense brick-kiln, under which are eight fires, the flame being carried by multitubular pipes, through the blast. The three tubes or *tuyers*, as they are called, which carry the blast into the smelting furnace, are by this means rendered so hot that I could scarcely bear to touch them. Hence the origin of what is termed "hot blasts," which not only give superior quality to the iron but tend to economise fuel.

But talk was not suffered to interfere with work. Long ago, John Cross gave me intimation that he must get ready for casting; so while the Engineer and I were analyzing the blast in its circuitous course, our furnace keeper had got his floor scientifically grooved and prepared.

The apertures from the furnace are made with sand, which the intense heat soon renders hard as stone. The keeper with a long iron gavelock made a hole through the baked sand at a higher elevation, and at some distance from the grooves. Out flowed an opaque, cream-like stream, which I conjectured at once must be the molten dross before mentioned. While sturdy John stood accelerating the slow exit of this cooling dross, I began again to ply him with questions.

"When do you begin to tap the metal?"

What time is it now?

"Half-past twelve."

"We shall begin at one o'clock."

"How many times do you tap the furnace in a week?"

"In a week?" said he, with a slight twist of the upper lip—we cast three times a day; every eight hours."

"Night and day?"

"Night and day."

"And how much metal do you produce in twenty-four hours?" I enquired.

"From sixteen to eighteen tons."

Well, thought I to myself, it is not a great deal for such a large furnace, with two engines and a noteworthy blast to produce. I could not help observing that six-

teen or eighteen tons of pig daily was but a small supply for such extensive works as Parkgate. John informed me that they had two other furnaces at the Holmes, about a mile distant, which smelted twice as much more, and all this is mixed with Staffordshire and other iron.

One o'clock soon arrived, and there was a great breaking with the gavelock of the lower sand-door, which was directly over the main channel leading to those little grooves and panshons for pig. The door was difficult to break through, and required hard and continued strokes of the gavelock to force an entrance. At length it yielded in the centre, when forth issued such a bright stream of molten liquid that I was perfectly dazzled with its brightness. People say that on a dark night it is almost impossible to look upon it—the gleam is so fiercely dazzling. This I can readily believe. Down rolls the liquid fire, not like the molten dross, in tardy evolutions, but with an active flow, soon filling the pans and channelled grooves, as the flood gates of each set are consecutively opened, while the aperture above, formed by the egress of this metal (the blast still going on) caused a fierce flame to rage through that high door, thus accelerating the motion of this dross. And now the engine is stopped, the blast ceases, the grooves and pans are fully of liquid fire, which, gradually cooling, bear on their surface a metallic tinge. I speed a parting token to the furnace keeper and the engine-tender, and leave Parkgate, with a firm resolve to re-visit it again at some convenient opportunity.

PUDDLING AND ROLLING.

Pig-iron varies a great deal in quality, partly owing to the combustible matter associated in smelting it, but more from the intrinsic nature of the ore. Thus some kinds of pig are most adapted for the forge, others for the foundry. But even of forge and foundry iron there are different descriptions according to the preponderance or otherwise of carbon acquired in the manufacture. That iron which contains the smallest proportion of carbon, and is capable of the least degree of liquefaction, being the hardest, is most suitable for the forge. I could easily imagine, from having once seen a smelting furnace tapped, that all such iron will necessarily contain a mixture of dross and other impurities; it must, therefore, be refined. This is done by subjecting the metal to a very intense heat in smaller furnaces, and afterwards, in some cases, suddenly cooling it with water.

If it will please the reader to follow us, we will take another brief survey of Park-gate ironworks. Not far from that great cone where the ore is smelted stands a refining furnace; indeed, the blast, both for smelting and refining, is derived from the same reservoir of compressed air. Although a cold and sleety day, we shall keep at a respectful distance from that raging fire. Is there anything in the world so powerful as the intensity of flame? Not anything. And yet how admirably it can be directed or controlled. In that huge smelting cone this power is hidden from the casual observer, or seen only by its effects once in eight hours, when the molten stream is liberated. In this refining furnace, however, the flame is open and exposed, heating the atmosphere for many yards round. This furnace is tapped every two hours, the dross running in an upper and the metal in an under stratum. As we may imagine, the iron deteriorates in weight by this method of refining; indeed, there is a great amount of waste to be allowed for in every process to which it is subjected. I have heard people say, with a very significant nod—"The iron trade is like coining!"

drawing their margin of profit between 77s. per cwt., the price of pig metal, and nine guineas, the present value of bar iron, allowing only for the expenses of working. They do not take into account the great waste of metal, amounting, in many cases, to considerably more than a third. That immense fortunes have attended the iron and steel trades we very well know. By-and-bye, we may have occasion to notice how such results have been and are produced. In these times of unlimitable limited Joint-Stock Companies, however, it is of some importance that the public should not be led away by superficial impressions.

But let us hasten to the puddling. The refined iron is broken up and weighed out for the next melting process, the quantity being regulated according to the article to be manufactured, about 4 cwt. most commonly going to a charge. Every one passing through the iron districts has observed numerous stacks of chimneys, something like twenty or thirty feet high, crowned with iron dampers. Many a time, particularly on dark nights, have we seen a lurid glare flaming upward to this great height, when the damper is raised, giving a vivid idea of the intense heat which must rage in the heart of this furnace. There puddling is done. There is no blast employed, the reverberating or puddling furnace being so constructed that a natural draught or current of air to the chimney accomplishes all that is desired. The furnaces are fed from ordinary grates, with the ashpits sunk into the floor ; the iron, however, is not put amongst the fuel, but at a distance above the grate, through which the flame rages, soon reducing the refined iron to a seething mass. The foreman opened a little door to show me the stuff, which he said was like "barm working in a pot." The simile was not without its appropriateness, only instead of a dull whitey brownness, the bubbling iron assumed a bright yellow colour, a thousand times brighter than burnished gold. A man commenced stirring this yeasty mass with a long poker, changing the latter frequently, or it would soon melt at the end. By being often stirred the entire mass is not only resolved to an equable heat, but loses by evaporation its former fluidity ; it is then separated into two or more balls in the furnace, each one consecutively being

lifted out and worked. I could not help admiring the wonderful strength and ingenuity of these men in handling the immense red-hot balls. One at a time they are jerked from the furnace, and, drawn along the smooth iron floor with long pincers to the steam-hammer. Down comes the ponderous foot upon the glowing ball, with a power equal to many hundred tons weight, forth issues a thick rain of fire, flying to a considerable distance. Incautiously I placed myself in front of this hammer, at about ten yards in advance, and was soon covered with red-hot hail. No doubt my clothes, although of thick woollen cloth, would have been severely burnt had not one of the workmen knocked the sparks off with his cap, and drawn me under the protection of an iron screen. I asked if the workmen were not sometimes injured, even blinded by these sparks. Yes, sometimes they were. A man was pointed out working with a shade over one eye, who had been rendered half-sightless by a similar casualty. Generally, however, the workmen manage to turn aside or run away before the sparks can hurt them. A lad who stood near had his fustian trousers set on fire, and a hole nearly as large as a plate was burnt in them. The lad exhibited no fear, however, but made jest of the matter, as he kept nipping out the ignited tinder with his woollen cap. All this time the man at the steam-hammer (who, I observed, was encased in fire-proof leggings) kept turning the ball or ingot until it was reduced to nearly half its former diameter, and fashioned square like a brick. He then drew it on a little hand-lurrey to a pair of heavy rollers (roughing-rollers, I believe they are called); the ingot was drawn through these, then back again (that immense pressure causing a further ebullition of sparks), the whole time required for hammering and rolling this shapeless mass into a plate of iron not occupying many seconds.

What next? Well, the rolled plate (more than an inch thick, and about two feet wide) is taken to a pair of shears and clipped. Clipped? Yes. Hammering and rolling has made the iron malleable; it cannot now easily be broken, so it must be clipped. I noticed several of these shears, constantly opening and shutting, which are worked by a kind of excentric underneath the

floor. Should the reader ever come into propinquity with such a monster, let him restrain the impulse to put his hand within the gaping mouth. A workman, to show me its power, placed the end of a locomotive rail between the opening gap. It cut the iron rail through with as much ease as a knife dividing a pound of butter; aye, and as quickly. The rolled plate is cut up into convenient pieces and thrown upon a heap. A number of these pieces are then weighed, and placed in what is called a "balling furnace." The iron has lost its former fluidity (it is wrought iron now), and can simply be heated. When taken out from the furnace the pieces adhere, it is true, but they are not assimilated; you may easily count the number of red-hot strata. After the combined lump was placed upon the lurrey, the question arose in my mind, What is it intended for—a bar (square or round), a plate, or a locomotive-rail? It is put through a number of grooved rollers, gradually diminishing, until it is rolled or grooved out the required size and form—a locomotive-rail five feet long, and weighing a quarter of a ton.

Wonderful is the appliance of machinery, especially in the working of metals! They leaven the pig-iron as if it was corn-flour, and make no more difficulty of the molten dough than a simple country wench does with her panchon of paste; with this difference, that what the united strength of a thousand men could not perform, is easily effected by half-a-dozen hands feeding and directing an immense kneeding machinery.

At Park-gate Ironworks everything is done, apparently, with such little effort—the rush of air to the smelting and puddling furnaces, the rapid whirl of fly and driving-wheels, the blows of the steam-hammer and crocodile, a kind of tilt-hammer, all these immense corces combined make less noise than one creaking wheel-barrow on the footpath.

A stranger to trade might imagine that the financial affairs of such large undertakings must necessarily, at times, result in confusion. Nothing of the kind. It is possible to work a great company with as much safety and simplicity as the trade of a country ironmonger, who retails his penny-worth of tenpenny nails. The principle adopted is one of mutual contract. An order comes in for a certain quantity and description of rails,

or bars, or plates, at a given price. The foreman over each department undertakes to do the labour at fixed rates, so that the general manager has but to supply proper material, and see that the quality of work coincides with the contract. One scarcely knows which to admire most, the sinewy strength displayed by some of these workmen or their dexterity. With what ease one of them can turn that big red-hot ball under the hammer, and afterwards direct it through the rollers. It seems but like a child handling his toy in play. Two men, with long pincers, take up a rail weighing a quarter of a ton, and lift it a considerable distance. I like to see men go about their work adroitly, without muddleduddle, or blundering. Why should not a workman be a genius in his trade, feeling a delight and nobility in doing what no one, or very few besides himself can do? And who can tell how much the mechanical glory and supremacy of England depends upon that man's efforts? Under any circumstances the result of his labour is useful. Even the situation of a puddler entails some responsibility. He must exercise discretion in melting his iron; if it is not properly stirred the condition becomes irregular; if it be taken from the furnace too soon, *i.e.* in a semi-fluid state, the stuff is not so good, while if it remains in the furnace too long it is burnt, and thus rendered almost worthless. Besides, however easily it may appear to us to be done, such labour is very hard and exhausting. The puddlers ought to be well paid.

But, say you, these men do the work, and the masters or shareholders—whoever they may be—devour the profits. Reader, are you a Radical? I fear much that you are a thorough Radical; and a Radical ought not to live. But, as such a one is in life, why, he must be born again; conversion is absolutely necessary. Will there not be masters and workmen until the end of the world? But, it is urged, men who employ a great number of hands, and risk great capital, sometimes get enormously wealthy. And sometimes they fail, losing, perhaps, the accumulated store of their forefathers, and the labour of years. Competition is very rife now, and there are a hundred vicissitudes in trade which a capitalist would escape if he were to invest money only

in tangible securities. But then how many thousands of hands would be idle, and how many millions of dependent mouths would gape hopelessly for food. The Apostle James has anathematized those rich men who withhold from labourers their due. But in this year of grace, when "times are good," and the influence of labour seems to be paramount, are not the workmen themselves becoming somewhat despotic? Are they not, in these prosperous days, spurred on to dictate terms in the spirit of tyranny, put the master to the alternative either to give sixpence or a shilling per day more wage, or let expensive works decay in rust and ruin? It may be, in a large firm, that the 2s. or 3s. per ton extra would make all the difference between a profit and loss to the manufacturer. Almost every town and neighbourhood is cursed by some mendacious, unscrupulous demagogue. Of this stamp are political nondescripts and agents of trades-unions, who find agitation a more congenial mode of living than work. These persons are ever ready to fight a battle for the working man; and after a great deal of gammon they send the hat round. Depend upon it those only do well who rely, not upon Acts of Parliament, or trades-union resolutions, but upon their own thrift and individual improvement. When the working-man has got a little freehold, or a hundred pounds in the bank, all of his own earning, he feels the dignity of citizenship, and knows how to estimate the frothy declamation of designing knaves. The constitution of England is both liberal and just. If this self-reliant working-man has a son, and there is the right stamina in him, what is to prevent that son taking rank with the highest in the land? Nothing. The history of our own times is fruitful in instances. I have heard that the puddlers of Park-gate, after paying their subordinates, clear five and even six pounds a week for themselves. And it is so throughout the trade. If I could speak to these iron men of Yorkshire altogether, this would be my friendly advice.—Enjoy yourselves—you have a right to do it—for hard work requires the best of meat and drink to keep the physical energies from flagging; but hit the happy medium: when you have had enough of meat and drink stop. Enjoy yourselves,

for the busy bees have most right to a taste of their own honey; but the winter of life will come, when there is no food abroad or no energy to gather it: therefore you should always have a little store in reserve. I know that your prodigal generosity brings gain into the pockets of frugal men, and not unfrequently enriches a whole neighbourhood; but take care of Number One; above all things take care of your families, for the scripture maxim is true—"He that provides not for his own, especially for those of his own house, has denied the faith and is worse than an infidel."

Masbrough Old Iron Works.

In 1746 the Messrs. Walker began their famous iron-works at a place called the Holmes, near Masbrough. The firm consisted of Samuel and Aaron and Jonathan, but Samuel was chief—a man of great ingenuity, and greater resolution. The neighbourhood, even now, abounds with instances of self made ironmasters, men who have gained a high social position and much wealth as the reward of their own individual exertions. Yet demagogues assert that the constitution of England is not favourable to plebeian enterprise. God help the nation when demagogues shall rule, and poor men look to legislative enactments as a substitute for personal efforts !

I have been able to glean but few particulars respecting the early struggles of this brave Sam Walker ; his public history dates chiefly from the time when he became a rich man. It is only then that true character is appreciated ; of the great struggle to win—how step by step this man worked himself into the foremost rank of iron-manufacturers we have scarcely any record. Thus much we know, however—at twelve years of age Samuel Walker became an orphan ; there were three brothers and four sisters left to push their way unaided through the world. Samuel qualified himself to become a schoolmaster, and did, for some time, teach rustic children in the little hamlet of Gunnowside. But he always displayed a strong impulse for mechanics, so that his leisure hours were passed in mending clocks and making sundials. It was while fixing one of the latter at Burness Hall that Sir Wm. Horton remarked to a visitor—“ This Sam Walker will one day ride in his carriage.” The Walker Brothers must have either made or borrowed some money before they could commence those iron works at Masbrough, which were never insignificant, and ultimately became one of the most important foundries in the world.

It strikes me that a practical man, well conversant with his subject and the neighbourhood, might write a very interesting volume upon the origin and progress of these ironworks. First of all—he would have to consider the national history of our iron trade a hundred and twenty years ago. How did it stand then? About the middle of last century there were but sixty smelting furnaces in England and Wales, producing annually 18,000 tons of pig-iron.* Great Britain now smelts above four and a-half million tons a year—more than all Europe put together. During nearly the whole of last century the British iron trade might be considered as decayed. There had been more iron made here in earlier times. Towards the close of the 13th century there were above 40 forges leased of the Crown in the Forest of Dean. In his *Treatise of Metallica*, published 1612, Sturtevant estimates the number of iron-mills in England and Wales at eight hundred, four hundred of which were situate in Surrey, Kent, and Sussex. About this period our iron manufacturers were busily engaged opening out and re-smelting great beds of scorizæ, which the Romans had left in many parts of the country, deriving thereby much very good iron.†

Strange, one will say, that the iron sinews of our country should not have been developed according to the national bulk and importance. We must take all the circumstances into account. Until towards the close of last century nearly all iron was smelted with charcoal, just as it is manufactured in Russia and Sweden now.

* At the close of last century pig-iron was taxed, and the returns issued in 1796 shew that there were 121 furnaces in Great Britain, yielding annually 180,000 tons. In 1827 we have 284 furnaces, producing 690,000 tons, of which 24 furnaces only belonged to Yorkshire, yielding 43,000 tons of metal. In 1836 the production amounted to about a million tons.

† Although the Romans knew and practised the use of "foot-blasts" they generally built their furnaces on the hill-tops, getting the draught from holes in the sides; but only a small proportion of the ore was smelted by this process. I have observed several of these ancient cinder-beds in the neighbourhood of Leeds, and in the valley south of Dewsbury. It has been remarked that the scorizæ of these furnaces on the hill-tops contain the largest proportion of metal, well repaying the expense of resmelting, while those in the valleys which are supposed to be more recent, and to have been planted after the introduction of air-bellows, contain scarcely any metal.

But for many years previously our forests had been gradually diminishing, and the public outcry against this threatened extermination of woods had been loud and long. So rapidly were the forests disappearing that during the reign of Queen Elizabeth, an act was passed to prevent the felling of timber for the purpose of making charcoal in all counties except Sussex, and some parts of Kent. The growth of wood is slow. No one need wonder at these statutory limitations, when he considers that it required eleven cords of wood to produce a single ton of bar-iron, so that the consumption of wood, even at the period when only 18,000 tons of iron were smelted annually would comprehend very many acres. The mechanical appliances for the blast were at this time very imperfect, so that a great deal more charcoal was used than would be required for the same purposes now. First of all the ore was calcined, or roasted. A layer of charcoal was laid in a kind of oven, then a layer of ironstone, then another layer of charcoal, and so on until the mass reached about a yard high. The charcoal was then fired from the bottom, when, in process of time, the whole mass cohered, but without being melted. It was then broken up and placed in the smelting furnace, under which an immense bed of charcoal was lighted. After two days burning the flame was intensified by the blast from bellows worked by two or three men, and they "cast" about once a week, producing from six to ten tons of pig-iron.

During the first half of last century, as we have seen, iron smelting had dwindled into a very narrow compass, because wood charcoal was not to be had. And yet for Russian and Swedish iron England was the best customer in the world. The importation of bar iron from Russia then amounted to 50,000 tons per annum, the average price being £35 per ton; in addition to which we took 20,000 tons of Ore ground iron from Sweden, our annual imports amounting in the aggregate to something like a quarter of a million sterling. At this period Swedish iron paid a duty of £2 8s. 0d. per ton.

In 1751 application was made to Parliament for the admission of bar-iron duty free from our own colonies, and after various struggles (which always accrue when

personal selfishness clashes with the public good) the contending parties seemed to compromise their differences by passing a law for the importation of American iron duty free into the port of London only, continuing the restrictions upon all other ports in the kingdom. This was practically negating the whole proposition, since the expense of getting coal or charcoal to London (principally on account of the heavy imposts charged at that port) rendered the formation of ironworks in the metropolis quite unremunerative, and there was a restriction prohibiting the removal of American iron to a greater distance than ten miles for the city of London.

It seems strange to us that the smelting of iron ore by pit coal should be a thing of such recent application. It appears that two centuries ago, and more, people had "notions" about it, just as we may have of applying hydraulic power to dispense with steam, or making an international viaduct. But the thing had to be done. First of all came the manufacture and introduction of coke. No doubt the idea would arise that as charcoal is half burnt wood, so coal might be calcined in the same way. But it was not until many years afterwards that the introduction of lime as a flux was first thought of. Small portions of iron had been smelted with coke by the application of what was then considered powerful bellows, but not in sufficient quantities to pay for the labour. Dud Dudley, a natural son of Earl Dudley, was the first to introduce lime in the fusion of iron ore, and obtained a patent for the process of smelting by pit coal. His method, however, met with immense opposition from the old manufacturers, who denounced his pit coal iron as worthless. The blast was very inefficient, so that not only was the iron of an inferior quality to that made from charcoal, but the quantity produced was very small, about five tons per week being the average yield of a Dudley furnace.* Towards the close of last century British iron,

* Iron made by charcoal absorbs the largest proportion of carbon, and is the least ductile. Charcoal is almost invariably used for smelting purposes in Sweden, and there is no better iron in the world. It is worthy of note that savage tribes, whose knowledge of and convenience for smelting are necessarily limited, have for centuries produced a quality of iron far superior to that of our best manufacture; indeed, it is almost equal to steel. They use charcoal and smelt small quantities very slowly.

both wrought and cast, was so inferior as to be generally excluded from Government supplies; the practice of smelting with pit coal and refining with coke had then become general, but the blast was defective. The introduction of what is termed "hot blasts" has worked quite a revolution in the iron trade.*

But let us come nearer to the old ironworks at Masbrough. The Messrs. Walker soon became A 1 in the production of cast-metal articles, from iron pots, stove and fire-grates, kitchen ovens, &c., to the largest cannon and metal bridges. Twenty years before this time the English people knew not how to make cast-metal articles properly. The practice then was to make the moulds in fire-clay, which were afterwards baked; but, in general, soon as the molten liquid was poured into these moulds they cracked, or burst into a hundred fragments. Most of our cast-iron articles, therefore, were imported. A quaker named Darby went into Holland to see how the Dutch made cast-metal goods, and found that the latter were cast in dry sand—a simple method, appreciated when known; but the

* The principle of "hot-blasts" was first applied by a gas-manager: he had noticed that a current of hot-air both purified the flame, and rendered the heat very intense. The iron-masters ridiculed such an idea. They had observed that iron smelted in winter was best (little dreaming that in summer-time the atmosphere contains most moisture), and came to the conclusion that the blast in summer wanted cooling: so they passed it through cold water boxes and even through ice. For twenty-five years there has been much contention about the relative superiority of iron produced by hot and cold blasts, and, certainly, during the last quarter of a century the market value of hot-blast iron ranged from 18s. to 20s. per ton below that of the other. There must have been some very good reasons for this difference in price. Hot-blast iron was, for years, excluded from the more important foundry work, partly because it did not bring so great a weight from the cupulo by at least one cwt. per ton, but chiefly because the foundry masters discovered that it contracted very much by irregular cooling, and therefore that the strength of such castings could not be guaranteed. We must bear in mind, however, that about half as much more iron can be smelted by hot-blast in the same period of time; beside which anthracite coal (which is most difficult to burn) may thus be used to advantage. At present there is scarcely any cold-blast iron in the market to be put in competition, but the question may fairly arise whether our manufacturers in their anxiety to produce the greatest quantity of iron, in all its stages, may not be going very far to deteriorate the quality.

knowledge worked another revolution in the iron-trade. This shrewd quaker gained his purpose, and, returning home with a number of Dutch workmen, soon produced metal pots of the right sort at a much cheaper rate than they could be imported. Friend Darby continued to work in secret, with closed doors, and afterwards obtained a patent for making "big bellied pots" without the aid of either clay or loam. But the secret, which was no invention of Darby's, soon oozed out, and as casting in sand was found to be almost illimitable in its application, I suppose the quaker either limited his claim, or found it impossible to resist the progress of innovation.

From 1750 to the close of last century, perhaps no other firm in the kingdom cast a greater amount and variety of articles than the Messrs. Walker. The weight of cannon cast at Masbrough during the reign of George III., when we expended so much treasure in the "sinews of war," was enormous, and as these cannon were bored on the premises, the mechanical appliances must have been on a very extensive scale. It is commonly believed that the Messrs. Walker cast the first iron bridge. Tom Paine, the infidel, claimed the merit of this invention, and says he conceived the idea from watching the progress of a spider's-web. Whether this be true or not, it is certain that he resided for some months at Rotherham, intent upon carrying out his designs, models of which had been exhibited before several learned societies. A bridge, formed principally of iron, was made by the Messrs. Walker, from Paine's instructions, and forwarded to London; but whether it was that the plan was defective, or that sufficient interest was not manifested in the scheme, certainly the bridge was returned to Yorkshire, and afterwards broken up. Local report (which, however, does not always speak truth) says, that the money was not forthcoming, and for this reason the bridge was not technically delivered, the Messrs. Walker concluding that they had better have the broken material than nothing. This was in 1787.* In 1790, however, the firm did build a

* We must not forget the fact that, six years before this date, a bridge with cast-iron arches was erected by Darby, at Coalbrookdale, over the Severn, and which remains a success to the present day.

bridge, and put it up. It cost £26,000, and the span of the arch was 236 feet wide. I allude to the famous bridge at Sunderland.

But, the reader is impatient to visit the Old Iron Works at Masbrough—to stand and look upon the very spot. Right; we will go there at once.

THE MANUFACTURE OF STEEL.

The Holmes is not a very romantic place whichever way it is approached. Suppose one takes the Rotherham and Sheffield train; he passes several large factories, where many useful and some ornamental iron goods are being made and fitted. In the distance glare a number of forges out of thick columns of smoke, and the traveller wonders how that plot of grass can look so green, albeit it is nourished in the succulent warp by the side of the river. Almost before he has time to note down this great natural problem, however, the train stops at the Holmes.

But you and I, reader, come further north; and, getting out at Masbrough, walk to the place. We pass rows of cottages. Every cottage has one wife, and every wife has a bevy of bairns; these afford visible evidence of a nation's progression. But never mind the destiny of future generations; we want to see those old iron works where the Walkers did such great things in their day. Alas! alas! this world is full of change! Not even a prosperous "established" firm can exist during three transient lives. On inquiry we find that those famous iron works have evaporated into a dim local tradition, and the very sites are re-constructed to make and roll steel.

Well, being here, it is desirable to see the works. The first we approach is a new and low but somewhat extensive square of buildings, which has a respectable we'll-to-do look. This, we are informed, is the firm of Peter Stubbs, whose shear and cast-steel have long been celebrated for their excellence. But how can we gain admittance? We look over the arched door-way, and under the dome, expecting to find that ill-natured deterrent—"No admittance except on business."

There is nowhere such a superscription. This is an excellent omen, say you—there is nothing going on here that the firm need be ashamed of. But an awkward question arises simultaneously in our breasts, viz.—What excuse shall we give to the gentleman in command for thus obtruding upon his attention? We cannot give him any cash orders, or money return for the time which he or his servants are asked to forfeit. What plea can we offer for admittance? A plain unvarnished statement generally carries most weight; we will lay the whole case before the principal—Two eminent philosophers and *litterati*, intent upon solving all the mysteries of science and art, request permission to view your works.

Mr. Tiecwick, the managing partner, hears our statement, and answers not a word. But he rings a bell, when immediately a messenger appears:—

“Shew this gentleman (you, reader, have only an ideal presence) through every part of the works, beginning with the iron-room.”

Nothing more was said; and it did not appear necessary to say anything more; except three words, which I believe were spoken by myself. They ran thus—“Thank, you, sir.”

We follow our guide across a spacious court-yard, clean and well paved, to the iron warehouse. Here are great piles of bar-iron, bearing the maker’s trade marks, which latter to me were perfect hieroglyphics.

“Where is this iron from?” said I.

“From Sweden; on every bar you see the maker’s peculiar mark.”

“And do you use no British iron for making steel?”

“Not a scrap; Peter Stubb’s steel is known to be good.”

“But it will be costly?”

“Peter Stubb’s name is a sufficient guarantee. Some of the Sheffield men will sell steel for less money than we give for the iron. But then,” continued our guide, turning up his nasal organ, “What is it?”

“No doubt it is poor stuff,” said I. “And who can calculate the amount of misery and sin which bad steel produces in the world? Look here, friend—How much

physical pain and mental irritation (the latter finding vent often in involuntary curses) does a bad razor, a pair of scissors, or a knife occasion. How often those poor natives of the South Sea Islands, or Seringapatam are vilely cheated by having palmed upon them axes and knives made of this intolerable steel. Can such people ever cherish kindly feelings towards England ? Never ! Their affections are *steeled*.

"But have you no people at work here ?" I enquired ; for up to this moment we had not met a soul, and the place had an air of aristocratic repose, which one does not expect to find in a neighbourhood like this. "Looking at these works from the outside, I should have supposed that two or three hundred hands, at least, were employed on the premises."

"We do not employ thirty men," replied our guide. The expense of making steel consists more in the preparation, and the stuff, than in labour."

The next place we visit is an empty "converting furnace," which has been undergoing repairs : here, too, there is nobody at work ; but we have a good opportunity of examining the place. The interior of this converting furnace is like a huge baker's oven ; but it contains two troughs, or pots, built of a kind of fire-stone, which are about fifteen feet long, and four feet in depth and width. As near as one could judge they occupy about half the extent of floor in the furnace. These troughs will each hold about nine tons of those iron bars which we have just seen. The bars, however, are disposed between alternate layers of charcoal, and when the troughs are full the tops are carefully plastered up with sand or loam. The furnace is then nearly filled with coke, and fired ; the intense heat being continued from four to seven days, according to the purpose for which the steel is designed. But although the flame encompasses these troughs, not a particle of the charcoal contained therein is ignited. This roasting, however, causes the iron bars to absorb an immense amount of carbon, so that when the furnace is cooled, and those bars are removed, the latter present a charred appearance, and are covered with blisters ; hence the name of "blistered steel." There are plenty of these bars lying about, and, judging from appearance

only, one might suppose that they are iron burnt and spoiled. I mentioned to our guide that such charred stuff did not harmonize with my ideas of steel, which ought to present a fine and silvery grain. The only reply he made was—"Follow me."

So we went forward into a large shed, where are a number of tilt hammers, one of which has a helve or shaft of wrought iron weighing fourteen tons. And yet they work as easily, and more quickly than the ship carpenter strikes the head of his spike-nail. Those bars of "blistered-steel" are broken up into pieces of about two feet long. These are heated separately, and hammered out into larger bars, the process of heating and hammering being continued two or three times. The quality of steel depends, in a great measure, upon the amount of hammering it receives; hence the designations of single and double sheer-steel. I noticed also that five of these heated bars were taken from the furnace at a red-heat and welded together under the hammer. The man who turns and directs these bars is suspended in a kind of chair by a rope from above (his feet never touching the ground), and he sways backwards and forwards with the exact momentum required to place each portion of the bar consecutively in contact with the repeated strokes of the hammer.

Thus sheer-steel is manufactured; and each bar, which appeared to be about five feet long, is stamped with the designation of "double-sheer," when it is such, and, in attestation, with the well known name of Peter Stubbs.

The manufacture of steel is not a recent invention. Most of the early eastern nations appear to have known and appreciated its use; for how could those ancient Hindoo works of art and Egyptian inscriptions have been produced without steel tools. The Walkers appear to have been amongst the first in Yorkshire who converted iron into steel; but at what exact period, and to what extent they adopted this branch of manufacture, I have not been able to learn.

Supposing those bars of iron in the converting furnace were reduced to a molten condition, would they not become steel? No, the mass would only become a superior kind of cast iron; and this is a singular fact

when we consider the method by which cast-steel is manufactured.

Benjamin Huntsman was a maker of clocks and an ingenious whitesmith at Doncaster: he also obtained renown for mending locks, roasting-jacks, &c.; in fact, this clever mechanician was a type of those noble pioneers who developed new resources in the iron trade. Benjamin Huntsman, of Doncaster, found great difficulty in getting steel of a good quality, suitable for his tools, and the springs of clocks. After repeated efforts he succeeded in making two or three pendulums of cast-steel, which are probably now oscillating in some obscure corner of Doncaster or the neighbourhood. In 1740 he removed to Hardsworth, near Sheffield, expecting to meet with greater facilities there in carrying out his experiments. No doubt Benjamin was somewhat of a chemist. He saw how iron could be carbonized with charcoal, by intense heat. But this result could not be attained if it were subject to the direct action of flame, or when evaporation is permitted to take place. The whole secret of making cast out of blistered steel, therefore, would consist in transforming the grosser material particles of carbon to a purer and more elastic state: the metal would thus acquire cohesion and flexibility, and, as a consequence, it would present a very fine grain. Huntsman's difficulties were these:—How to construct a furnace which should engender a heat far more intense than any yet known; what volatile substance to introduce successfully as a flux; and, more important than all besides, how to make a crucible which would stand the fire, and securely retain the molten liquid. After months of patient industry, and many failures, this courageous man did succeed in producing a first-class article of cast-steel.

But where is our guide? I see;—he has gone under one of the sheds, where a man is busily engaged grinding charcoal; the latter being about as disagreeable and unhealthy a job as it is possible to imagine. This man has a hood of canvass over his face, and from "top to toe" is covered with black charcoal dust. We do not stay long there.

"But you make *cast-steel*?" I said.

"We do: wait a bit and you shall see the whole

process. 'Now George,' said our guide, turning to the grinder, 'that last charcoal was not half washed—you must wash it better, George.' Then he volunteered to us a little trade information. 'We make the charcoal taken from the converting pots do duty again, after being washed and riddled, mixing half old and half new together.'

"This way, please." Our guide thereupon opens a door, and we are introduced to a solitary workman, smeared all over with clay. Our attention is directed to a heap of this blue-white fire-clay, which is of a pasty consistence. The mud-lark told us that he came at six o'clock, and for four hours was kneading that clay with his bare feet. Close by was a heap of the original earth, which had a raw, granular appearance; while this kneaded mass looked very much like putty, it was so fine and cohesive. The workman takes a quantity of this soft clay, and plasters the inside of a metal mould, which resembles a two gallon jar. A wooden core is then worked in the inside, moulding the pot into the required form and thickness. But how to get the clay jar out of the metal mould was a problem to me. "The workman made no difficulty of the matter; he lifted the whole mass on to a low trestle (the wooden core still filling up the cavity of the pot), when the metal mould was sloughed gently upwards, leaving the soft pot perfect in its symmetry. We notice a long range of these fire-clay articles drying on a shelf, previous to their being baked in a furnace. Our guide told us that this man is regularly employed modelling crucibles, as the pots only last for three heats; that is for a single day.

We then proceed to the melting furnace, which is divided into ten compartments, all burning together; and there is a deep arched cellar underneath to accelerate the draught. Each of these compartments holds two pots or crucibles, and each crucible contains about 32lbs. of blistered steel. The process of melting occupies about three and a-half hours. It luckily happens that we have only to wait a few minutes, when the operation of teeming the molten liquid will begin. I observed a number of little funnels standing upright in the floor: these are simply moulds into which the

melted steel will be poured. And now two of the four workmen dipped large strips of thick hempen sackcloth in water, and proceeded to wrap them round their legs and waist : if they did not do this all their clothes would be burnt. Each one then takes a long pair of tongs, having a kind of fire-screen or shield attached, and, commencing at the extremities of the furnace (the latter containing ten separate doors), proceeds to lift out one of the pots, and places it upon the floor. We stand aside, at a respectful distance, fearful that the crucible should burst ; for if it does burst, then woe betide our skins ! The fiery thing glows fiercely on the floor, but neither hissed nor belched ; it stifled all its rage in its own bosom. A man with long pincers takes off the lid, opening its burning mouth—but here our simile must end.

This crucible is lifted from the ground, and the liquid steel poured into a mould ; but, so far as our experience extends, we have never seen anything under the sun half so bright and dazzling as that glowing stream of molten steel. How this man could bear the burning heat and splendour near his face is a mystery of endurance.

In process of time all the crucibles are emptied ; but it was a laborious and very hot job. We are hereby impressed with one notable fact, which stands out in opposition to the ordinary results of natural laws ; the two steel melters are fat—enormously fat—one of them being at least seventeen and the other fifteen stones in weight. We should have thought that exposure to such intense heat for several hours in a day would be enough to shrivel the flesh, and dry up even the marrow in the bones. In this case, however, the result is quite different ; indeed one may often notice that puddlers and smiths whose occupation exposes them to continuous and oppressive heat are often men of physical weight. It may be that only those of great bodily frame and much strength are fit for such like employment ; still, with good health and nourishing food, it is surprising how much exhaustive labour the human frame will bear.

The moulds are lifted from their upright position in the floor, and, being formed of segments, they separate,

each exposing an ingot of steel, which cast-steel is afterwards hammered or rolled, according to the various purposes for which it is designed. Speaking of rolling, brings to our notice the Steel Rolling Mill conducted by Messrs. Habershon, which is immediately adjoining to Peter Stubb's factory, and occupies the principal site of what once were Walker's Iron Works. Here we may observe portions of the very walls, and the "races" where the original water-wheels once revolved (now replaced by others of a similar construction), together with many antiquated remains; indeed, the whole place looks like a venerable relict of the past. A young man from the office, whose relation to the firm I did not enquire, accompanied me through the works; and I stood for some minutes admiring the wonderful dexterity with which irregular bars of steel are heated and rolled into long symmetrical wires and thin hoops, the latter being intended, principally, to expand the skirts of ladies' dresses.

Iron Branches in and around Rotherham,

PART I.—THE HEAVY TRADE.

Masbrough, and Kimberworth,* and Rotherham (which form in reality but one town) subsist by the iron trade. Adjoining the railway station at Masbrough we have the Midland Works, where iron is puddled and rolled into almost every description of bars and rods. In the station yard, along the sidings and upon the trucks, are great numbers of railway wheels, each pair fitted to the axle complete; these are waiting to be despatched to various locomotive and waggon manufactories in the kingdom. In the street beyond, carts and luries are bringing more of these railway-wheels and tires, so that a stranger might conclude, on very good evidence, that one of the principal trades in Rotherham is the manufacture of railway-wheels and tires.

Rotherham and railway-wheels—let us twaddle a little upon the conjunction. Fifty years ago, it was commonly believed that railways would ruin the country, and their promoters were harassed at every step. Great landowners could discern nothing but disadvantage in the severance of their estates by iron roads, while the general public predicted nothing but ruin in the disturbance of organized institutions. Post-houses, with their vested interest in stage-coaches, stage-waggons, post-boys, and stable-boys, would all “go to the bad.” Harness-makers and shoeing-smiths would find “their occupation gone.” Farmers would have no occasion to grow oats, because there would be few horses to eat them; consequently a great portion of the land would have to lie waste. Now, when we find that for every

* In the reign of Henry II., Richard de Builil, granted to the Monastery at Kimberworth, four forges for smelting and working iron. So far as we have been able to discover this is the earliest record of any established Iron-works in South Yorkshire; and, when we consider the difficulty of transit, at this period, we may naturally conclude that such a supply of metal would afford employment to many artificers or smiths, in this immediate neighbourhood.

man and horse thus diverted, at least twenty have found employment in consequence of railways, we can afford to smile at the short-sightedness of our fore-elders.

A few tramways for the carrying of coal were in existence so early as the middle of last century; and about thirty years afterwards cast-metal rails nailed on to wooden sleepers might be found in two or three colliery districts: then arose, in full dispute, a question how best to furnish motive power along these primitive tramways. Sails fitted to the waggons, so that the latter might be partially propelled by wind, were introduced; but the wind is a very fickle and uncertain agent. At the commencement of this century two or three sanguine, practical men were certain that steam-engines might be constructed to drag great weights on these metal roads. Trevithick made the first locomotive engine worthy of the name, but it was a cumbrous array of wheels, cogs, and spurs, regulated by a large fly-wheel. At this time, and for many years afterwards, it was thought impossible that wheels could move on smooth rails simply by their own traction. The argument was considered unanswerable that any weight placed behind an engine must inevitably bring it to a bearing, since the wheels would turn round without being able to advance. Everybody said that smooth wheels could not "bite" and advance on smooth rails—the thing was impossible; consequently either the wheels or the rails, or both, were made with cross-grooves, notches, and even bolts. Blenkinsop in his tramway from Middleton to Leeds, opened about 1812, has one entire length of rails notched, like a saw, into which the toothed driving-wheel of the engine worked. By this method an engine was able to drag thirty coal waggons three miles an hour. In 1826, while the Manchester and Liverpool railway was being constructed, steam locomotion was exceedingly defective, the rate of speed on the Stockton and Darlington line being about five miles an hour. I could not help smiling, a few days ago, on reading a paper in the *Gentleman's Magazine*, in which the writer contrasts the relative superiority of steam over horse locomotion. The writer puts forward the very sanguine prediction that a steam engine will, some day, be constructed to drag twenty tons weight at

the rate of ten miles an hour. Neither the Government nor the country had any faith in steam locomotives. When, in 1829, a bill for the Newcastle and Carlisle railway passed through Parliament, the Act was granted only on condition that horses, and not engines, should be employed in propelling the trains. After steam engines had superseded horse carriages on the Stockton and Darlington line, it was agreed to test the relative speed of steam locomotives and stage coaches by a fair race. The engine train arrived in Stockton about 300 yards ahead of its competitor; and this was considered at that time an extraordinary feat. The Manchester and Liverpool directors, previous to the completion of their line, offered a reward of £500 for the best locomotive engine, one of the conditions being that it must draw a train containing twenty tons of freight at the rate of ten miles an hour. Competition brought out the famous "Rocket" engine, with multitubular boiler, manufactured by Robert Stephenson, and Co.

What railways have become since that date we know. But what will they become in the future? Will they last to the end of time? This may not be, for there is nothing so certain as that everything will change. Truth, honour, and goodness are eternal! Yes. But we are speaking now of mechanical and material forces: the particular application of these do not long retain their ascendancy. The best commercial enterprises have but a few years of prosperity, then they decay. Sometimes, on a wet day, or when the spirits are damped by a November fog, we are prone to discover symptoms of national decadence. Even in these sunny days of June, some sigh over the loss of our political power and prestige in the scale of nations. But, strange anomaly, these grumblers maintain that our national honour was greatest when, financially speaking, we were most impoverished, *i. e.*, during the beginning of this century, when, after the sequel of Waterloo, crowning a series of devastating wars, we were enabled to dictate terms to Europe. Let us hope, for the sake of our national morality, that this logic is false; that, for the sake of peace, we have not stooped to an ignoble cowardice and vacillation.

Some people even now contend that over production

will inevitably prove our ruin, for, say they, are we not lavishing with a prodigal hand the natural resources of our little island? But the prodigal laughs at this sort of teaching. Pooh! says he; the mechanical genius of England is only half developed. While we retain our courage and industry and hope our countrymen will prove sufficient for every emergency. Long before the last acre of our coal-fields is exhausted we shall find that there are imponderable forces in nature capable of producing still mightier results. We have formed a language out of electricity, and, if the thing be needed, we shall bring the lightning from autumnal clouds and dribble it out all the year round as a mechanical power. And the Great Disposer of Events is not in this man's thoughts. Nature and self-idolatry fill all his soul.

But there is another type of man still living in this beautiful valley of the Don; and it chafes him to hear such talk. Let us not disown or disguise one important fact—secretly and silently there exists an antagonism between our old landed gentry and the new potentates of trade. Truly the aggressive spirit of the latter has, during the last forty years made rapid strides, poisoning the atmosphere of our most sylvan retreats, while discordant noises, night and day, startle the denizens of old cherished solitudes. Should this innovation proceed in the same increasing ratio for another century, South Yorkshire will be a conglomeration of workshops, with branch railways almost as general as footpaths are now. The probabilities are therefore that rail-mills and railway wheel manufactories will extend themselves, and make Sheffield part of the suburbs of Rotherham.

On arriving at the bridge which divides Masbrough from Rotherham, hundreds of men and boys were hurrying down Bridgegate in a kind of jog-trot, amidst much laughter and shouting.

"What is up?" said I to a man whose face developed a true Yorkshire grin.

"You'll see," said he, "only wait a bit."

The spectacle was novel—one man wheeling another man in a barrow; and a number of boys were accelerating the vehicle's motion by means of a rope. The principal object of remark was himself bound hands and

feet. Was he ill? No; for in that case there would be no cause for merriment. Was he drunk? No; the man sat up in perfect consciousness, with a lugubrious expression, partly of shame, and partly of chagrin. For thirty years, or more, it has been a custom at the Phoenix Works, when any workman or apprentice absents himself without leave, thereby causing the machinery, and other men to remain idle, that he shall be fetched to his work in a wheelbarrow. The custom may have a salutary effect, since few men, or even boys, will be insensible to the degradation. I had noticed the name of Owen and Co., Phoenix Works, on the bosses of those railway wheels at the Midland station, and having once met somebody who knew somebody who was an overlooker at the place, I ventured to make the name a plea for admission.

The Phoenix Works have no very imposing appearance, so far as it relates to the building; but there is an air of business about the place which would convey an impression that everything is made subservient to the principle of making money. The yard is choke-full of railway wheels—immense rows of single wheels, in various stages of manufacture, and great squares of double wheels fitted to the axle, and ready for consignment. One of the first objects of machinery which engages the attention on first entering the yard, is a spoke-bending machine, which acts almost like a sentient, intelligent thing. Two solid triangular pieces of metal advance, on the principle of a slide-lathe, and, seizing hold of a straight red-hot bar of iron, fresh from the furnace, bend it across a central anvil into a triangular wheel-spoke. After the requisite nip, the flat-iron hands return, liberate the perfect spoke, and, advancing, grasp another piece of red-hot iron, which is ready waiting to be bent. Usually four of these triangular spokes are taken and cast into a metal boss, thus forming a perfect wheel, minus the rim. I was most anxious, however, to see a railway wheel forged in a die, all at a stroke; for which patent process this firm is chiefly distinguished. The preliminary process consists in taking four of those bent spokes, with four or five small rings piled together for the boss, and four or five large rings piled together for the rim; the whole

being tied round and kept in their place by iron wire. The fagotted wheel is then taken by an enormous pair of pincers and placed in the furnace. In about half an hour, when the whole has attained a welding heat, these pincers lift the mass into a metal die, which, as a mould bears the impression of a perfect wheel in sunken characters. This die, being directly under a ponderous steam-hammer, receives a succession of strokes, the stratified pieces of red-hot iron being thus forged or solidified ; and when sufficiently cool to be lifted from the die there is a solid wrought-iron railway wheel, complete, except the tire or outer rim. How is the tire made ? Nothing in the iron trade has interested me half so much as the principle of making what is called the " weldless tire " ; but it is exceedingly doubtful whether I may be able to explain the process in a few words, and without diagrams, so as to be clearly understood by the reader ; especially as my entire experience of the subject is confined to a single observation, extending over quarter of an hour. To begin—a number of straight bars of wrought-iron are bent by a very simple process into circular rings, about twenty inches in diameter. Four or five of these are then piled together, and put into a " balling furnace." When sufficiently heated the cluster of rings is put into a circular metal dish, under another steam-hammer. The foot of this hammer is a circle, of narrower dimensions, containing a kind of flange or groove, so that in descending it fills up the centre of the metal mould, and forges the red-hot mass into one solid ring of the required thickness. Two or three strokes of the immense hammer accomplishes all this in a few seconds of time ; and such is the power of concussion that the floor for many yards round shook as if by an earthquake. Thus is forged a solid ring of iron, weighing about 4 cwt. ; but, at this stage, presenting no resemblance to a perfect railway-rim, excepting that it is circular. The next process is curious and admirable. This ring, after being heated in a furnace, is put upon a circular revolving shaft, which causes the red-hot ring to spin round at a moderate rapidity. In revolving, simply from its own gravity and momentum, it becomes enlarged in diameter, and would, doubtless, acquire an

enormous size were it not for two revolving wheels placed at a gradually widening distance on each side. These wheels exercise a double effect, first of determining the diameter of the rim, and secondly by the force of resistance, cutting away that portion of the ring on which they act, so as to leave a flange on the outer edge ; in fact, by this process the tires are shaped as if they had been turned in a lathe. The perfect tire is afterwards heated again and put upon the ground ; when one of those die-formed wheels is placed within it. This was done very easily ; indeed, I could have got my fingers between the rim of the wheel and the red hot tire ; but the latter gradually contracted in cooling and grasped the wheel as in a vice. The next process was the drilling machines, which were regulated by a number of boys, not more than twelve or fourteen years of age, who manifested an expertness and precociousness equal to manhood. The wheels were placed in a horizontal position upon the floor, and had holes drilled through the rim of the wheel in four places corresponding to the bent spikes. Red-hot bolts were afterwards inserted into each hole, which are fastened in a few seconds by an admirable invention called a "punching machine ;" and thus the wheels are ready for being fitted to the axle.

A little further on, close to the river bank, stand the Northfield or Swedish Iron Works, so called because formerly a great deal of Swedish iron was introduced into the manufacture. The other name, too, is quite expressive, because we have even now to pass through a great field before this pile of buildings is approached. The reader may, probably, have seen newspaper notices that a patent anchor was being manufactured here for our national war-ships. Anchors—these are important things ; and we should like very much to see how they are made. Who invented anchors ? Nay, that is a puzzling question, for they are of very ancient origin. At first, we may surmise, they would be simply weights let down to the bottom of the river or sea, to bring the ship to a bearing ; but what man conceived the happy notion of a metal hook is past conjecture, and will never be known. No one can tell us to a century when even the double-armed anchor first came into use ; the origin is so remote. Pliny says that the Tuscans manu-

factured the first anchor which deserved the name, and certainly it is one of those necessary inventions which, once conceived, would be implicitly adopted, a hook being the most perfect form an anchor can assume. True there have been slight modifications in the shape, and numerous improvements in the manufacture, but the principle of curved arms has been invariably retained; nothing is so well adapted to stick into the ground. Great care is required in selecting the materials and in welding the various parts. The iron must not be too brittle, or the strain on the anchor may cause it to snap; neither must it be too soft, or the strain might straighten the arm, so that the latter would lose its hold in the ground. Good anchors are, therefore, very desirable; and, no doubt, perfection consists in combining lightness with strength. Patents have been obtained for anchors with a hollow shank, the centre being filled up with a wooden core, through which the cable is carried. For one of this character a patent was obtained by Captain Rogers in 1828; but none of these segmentary anchors ever became general.

Two or three years ago the Northfield Iron Company, Limited, entered into an arrangement with this same Capt. Rogers to carry out his patent of a new solid anchor, and after spending something like £30,000 on additional plant and machinery, commenced the manufacture of anchors and pickaxe kedges on a large scale. For a while the hopes of the patentee and shareholders were buoyant, since the invention promised to be a great success; orders came in from the Admiralty and merchant service; the anchors were tested, and, although lighter and more compact than those in common use, were found to deflect less than the best anchors of any other manufacture; they defied competition. But a few weeks ago some blighting influences settled upon these ironworks of Northfield; Captain Rogers died, the managers found themselves unable to work advantageously, and the whole affair is now being wound up in Chancery.

I asked a lime burner, who was busy at his kiln, which was the entrance into the Northfield Ironworks. "That is the road into Sweden," said he, pointing with his finger to a certain portion of the buildings. Fol-

lowing this direction, I was soon in "Sweden." But the great steam-hammers stood in grim silence, the huge rollers did not revolve, and there was no life in the furnaces. Two or three workmen loitered about here and there like melancholy watchers in a city of the dead. A clerk belonging to the establishment went with me round the works ; but it was impossible to drill into a novice like myself any correct knowledge or interest in the manufacture without seeing the machinery at work. I knew beforehand, from report, that the common method of fashioning anchors was by what is called " piling and fagotting," *i.e.*, on a bar of iron the required length shorter bars and " scrap," are placed so that the several pieces shall overlap each other, and are bound together by wire hoops ; afterwards, when the mass has acquired a welding heat in the "balling furnace," it is forged under a heavy steam-hammer. About twenty anchors are scattered about the works, some weighing from sixty to eighty cwt., others not more than a quarter of a ton. The distinctive feature of each, so far as I could see, consists in the short, powerful arms, terminating in a broad palm, which latter, from having been hammered in a die, has all the appearance of cast metal. The shank is long in proportion to the arms. The stock is not of wood, but a solid mass of wrought iron, the centre being formed in a die and afterwards lengthened by welding. It would be an interesting sight to notice the process of forging in dies under the heavy hammers ; but the costly machinery was all inactive. Said I, to myself—a little company, with a little of the "ready," will perhaps buy this place up, at about one-tenth of its cost, and afterwards make a fortune. Thus it is, in this philanthropic age, that one man rises on the ruin of another.

Afterwards I called at the Rotherham Forge, conducted by Messrs. J. and G. Brown, which, although not the largest, has the reputation of being one of the soundest firms in this neighbourhood. Here is a rolling-mill for bar-iron, and another for steel, and a ponderous steam-hammer to forge "weldless tyres." Unfortunately it was the dinner hour, so that all the machinery was silent.

PART II.—STOVE-GRATE AND ORNAMENTAL WORK.

Rotherham is famed for making stove-grates, umbrella and hat-stands, iron mantel-pieces, toilet tables, balconies, and many articles very ornamental, both for the inside of gentlemen's houses, and their gardens or lawns. Iron is tough stuff, and better than wood for many stationary purposes : moreover it does not decay so fast with the weather, and is capable of vast artistic designs.

As a nation increases in wealth it has regard to personal comfort. Perhaps some one will say—Yes, and in the same degree it sinks into effeminacy. What do you mean by effeminacy? Savages and semi-barbarians can almost live without fires. But the question still arises—Is it best to do so? Barbarians may have great bodily strength, and the physical power to endure great hardship. They may puncture and hack each others flesh without experiencing a sensation to faint, and not “catch their death of cold” when they lie out of doors on a pillow of snow. But what of that? Does that prove that a mere animal existence is better than the progress of civilization? Suppose for a moment that England had never cultivated domestic fires, there would have been no “fire-side talk,” no pictures of social life like those which the effeminate Cowper reproduces—

“Now stir the fire, and close the shutters fast,
Let fall the curtains, wheel the sofa round,
And, while the bubbling and loud hissing urn
Throws up a steamy column, and the cups,
That cheer but not inebriate, wait on each,
So let us welcome peaceful evening in.”

Or, again—

“Me oft has fancy ludicrous and wild
Sooth'd with a waking dream of houses, towers,
Trees, churches, and strange visages, express'd
In the red cinders, while with poring eye
I gaz'd, myself creating what I saw.”

We have no record of any chimnies being built previous to the fourteenth century. Before this time, in

our great halls, it was the custom to make a fire in the middle of the room—a wood-fire, not a coal-fire, for coals were considered too dirty,—and the smoke escaped by any aperture where it could. Fires for personal comfort did not become a recognized institution until about the reign of Henry VIII. Stove-grates, however, did not come into use until long after the introduction of chimnies, so that the fire still occupied its ancient place upon the floor or hearth. At that time the fuel was invariably wood or peat, which are best adapted for combustion upon a stone-hearth. Stove-grates and the use of coal are evidently contemporaneous, because coal-fires require some contrivance of this kind to assist the flame; else it would soon die out. The first fire-grate would, no doubt, be a great curiosity to the present age, standing out in marked contrast with our polished patent registers. Like many other important inventions its early history is buried in obscurity; we know from the direct line of succession that there must have been an original fire-grate, but can only conjecture as to its primitive form and capacity. But, a truce to speculation, let us see how stove-grates are manufactured at the present day.

Effingham Works may be considered the Industrial Palace of Rotherham; but, built in a low and retired situation, they almost escape observation from the casual visitor. Effingham Works are hidden from view both by the road and rail. Still, on mere architectural grounds, they are worth travelling a few yards out of the great public thoroughfare to behold. If an ancient local manufacturer—say one of King James' time—could wake up and stand right in front of this ornamental pile, he would perhaps answer—"You lie, sirrah; these are not workshops for grimy men, but the mansion of some great nobleman." So much has the external position of skilled labour advanced.

Having received courteous permission from the firm (Messrs. Yates, Haywood, and Drabble), let us see how those five hundred artizans employ their time—what kind and variety of articles are manufactured here. As in the carpet, cotton-printing, and lace trades, ingenious men are employed as designers, while any drawing submitted to the firm will, if accepted, be paid for

according to its merit. These designs are then transferred to the model-makers, and carved in either wood or lead. Not unfrequently the drawing is taken by some artist workman, and first modelled in clay or wax, then cast in lead, which afterwards receives minute elaboration by the graver's tools, and serves to produce a more perfect and permanent model. I found that, in many instances, the employment of lead in model-making was much more economical than wood-carving. Supposing you want a narrow strip—say twenty feet long—of uniform tracery or raised work, to ornament a cornice or a balcony; it will not be necessary to carve above two feet in lead, from which other lengths are cast (also in lead), until the required extent of model is obtained, when the separate lengths are united so accurately that a practised eye can scarcely detect the joints. Thus nine-tenths of the labour of carving is saved. "But," said I to a workman, "this practice must necessitate the storing of much dead capital in lead models." "Not so," said he; "we do not preserve the lead models, but as soon as a perfect casting is taken in iron, the latter becomes our permanent model and the lead is re-melted."

Here we perceive how the iron trade can be artistically developed, and cease to wonder that in so many articles cast-metal should supercede carving in wood and stone. This is the argument :—A man may design and execute some rare piece of carving, which will adorn one particular spot, for centuries, it may be. But it is only an isolated "thing of beauty" after all; whereas there are hundreds of men and women who would like to have beautiful objects of art to brighten their dwellings if they could afford them: but these objects are far too costly for their means. Supposing, however, we turn this inimitable piece of carving into a model; the firm at Effingham Works would be able to reproduce it *ad infinitum* in metal, at a very moderate expense. You may have a drawing-room completely furnished with iron—chairs, tables, sofas, cabinets, cheffioniers, picture-frames, mantel-pieces—all of uniform antique, or modern-florid patterns. And very magnificent such a *suite* would appear, the enamelled or polished castings being ornamented with knobs of ormolu or festoons of

burnished brass. If not as portable, such articles of furniture would be more durable than wood, and where the appliances of manufacture are complete, they might be produced at a very moderate cost. But where price is but a secondary consideration, the bed-room or drawing-room *suite* might be painted and enamelled, so as to produce the most chaste or gorgeous effects. The application of iron to household furniture is best exemplified in bedsteads, which are manufactured by scores of thousands annually.

Ornamental iron gates and metal balustrades form no inconsiderable item of trade at Effingham Works.

In one of the érecting shops I noticed an immense iron cornice, and found upon inquiry that it was part of a contract destined for Bombay. It appears that a few wealthy Hindoo merchants, who have commercial relations with England, decided upon building a crescent &c., in Bombay, which should vie with anything of Eastern magnificence. But, as every one knows, there is great difficulty in procuring building material and skilled labour in India; so the architects resolved to produce in cast-metal work which has hitherto been done only in wood and stone. According to their plans the foundation and walls of these mansions are to be of native brickwork, which will be encased and strengthened with iron plates and rods, made and fitted in England, the whole to be surmounted by a massive metal cornice, of which this now in course of manufacture forms a part. It appears that these terraces average from sixty to seventy feet high, verandated in cast-iron arcades to the cornice, the style of architecture being what is called "Venetian Renaissance." To give some idea of the boldness and effect of the work it may be mention that the corning alone measures eighteen feet high, while the projection to the rain-water guttering is about five feet, and supported by groups of handsome trusses, with deeply cut mouldings and ornamental panels between. The castings consist in great part of large plates, only quarter of an inch thick; these require great skill in manufacture. The weight of metal in the cornice alone is upwards of 400 tons. Why should not Anglo-Hindoo merchants, who martyr themselves for wealth, rear their palaces in the sun?

But the sun scorches and wizens not only themselves, but their mansions. The expansion and contraction of building materials under the tropics has been a matter of serious consideration for years. It is well known that even iron has a tendency to displace itself under variations of the atmosphere, unless this condition is specially provided for. It would appear, however, that in the production of these magnificent Bombay buildings the artist, architect, and engineer, with the manufacturers, are most closely allied.*

On looking through my notes I find that they partake somewhat of a random character, partly owing to this fact, that in going through the works I was unable to follow the consecutive processes of manufacture. As before observed, Effingham Works, as buildings, are worthy of attention for their own sake. They are principally composed of three great blocks, the first or front (containing the principal workshops, offices, &c.) is 700 feet long, and three stories high. The foundry, comprising the second division, is considered one of the finest in England, being 500 feet long, with a clear span of 70 feet in width, the arched girders resting upon the side walls only. This immense and lofty building is divided in the centre by the cupolas, or melting furnaces. The third block consists of mould-shops, smith-shops, &c., &c. I learn that there are, in the entire buildings, 700 windows, representing upwards of 25,000 feet of glass, in addition to the great roof-lights. But let us turn to the leading articles of manufacture. Although very interesting to witness, I could scarcely describe in detail, without weariness, the various processes by which one of those costly stove-grates is brought to perfection; how the models, being carefully scraped and filed, are sent into the foundry, where between two layers of sand in iron frames, a very close and careful impression of each object is taken; how the fluid iron is duly poured into the moulds; how the castings thus produced are, when cool and dressed, taken to the grinding wheel, where the surface is pre-

* In this short sketch of a very interesting branch of trade, I am indebted for much necessary information to Mr. E. Firth, under whose superintendence the Bombay order is being executed.

pared for the finer kinds of finishing ; how the mouldings are forged, bent, or fitted, according to the design ; and how, lastly, after a great deal of care and labour has been bestowed by the polishing and glazing wheels, each part of the beautiful structure is securely fastened together.

In marble—such as mantels, the tops of hall tables and ladies' work-stands, &c., the firm take the whole produce of several continental workshops. I saw a diversified array of mantels, with the stove fitted to each, which would have gladdened the heart of a sculptor to behold, so beautiful were the designs, and so admirable was the execution.

Besides the noted Effingham Works, Messrs. Corbitt, of Masbro'-street, are widely celebrated for the manufacture of stove-grates, &c., while the Baths Foundry, conducted by Messrs. Morgan, Macaulay, and Waide, possesses considerable trade in stove-grates and various other castings.

The Metropolis of Steel.

Sheffield does not produce any iron ; so far as we know, there is not a single smelting furnace in the whole district of Hallamshire. Neither is the site of this large smoky town remarkable for its mineral wealth—ironstone and coal. True, within a radius of twelve miles much excellent coal is being brought to the surface, and I am greatly deceived by the geological formation if there is not in South, as in North, Yorkshire a considerable quantity of argillaceous ore. The yield of ironstone about Thorncliffe and Ecclesfield will not be so abundant as in the Cleveland hills, and may not prove so excellent in quality as that of Low-moor, Bowling, or Farnley ; still it admits of a question whether such ore would not well repay the labour of getting.

In these days of Macadamised and iron roads, the difficulties of conveyance vanish. But how was it in the olden time, when every bit of raw material and merchant stuff had to be transported in and out of Sheffield upon pack-horses ? Still, in those ages—ever so many years ago—the town was celebrated for manufacturing sharp-cutting instruments. It has been surmised that Sheffield craftsmen were armour makers to the Ancient Britons. If it be asked, what historical evidence there is for this assumption, we may reply, What historical evidence is there to controvert it ? None ; therefore, let the matter be chronicled among the minutiae of possibilities. On a fine elevation, named Wincobank (but which, in the beginning, might be called Winco-camp), about two miles from Sheffield, there are remains of a military encampment. The circular form of the camp

on that grand hill-top may still be observed. It was originally large and commanding. This favourable site is one of nature's rearing, as is to a great extent the hilly range extending from it west towards Grimesthorpe, and eastward for six or seven miles, becoming lost in the valley (which, anciently, would be a great marsh) in the neighbourhood of Mexborough. But there is abundant evidence that those natural ramparts have been strengthened and extended at a great expense of labour and material. A question now arises—Who made these fortifications? The opinion generally entertained is that Winco-camp, with its ramparts, was one of the chief defences of the Brigantines.* The most uncultivated tribes have made great embankments, and reared immense earthworks. But must we infer that they excavated with their fingers, and carried up the material in the hollow of their hands? No; they had tools of some kind. There is a notion very prevalent that the Ancient Britons had no implements of iron or steel; nothing but what was made of bone or flint. What evidence have we to support this conclusion? Nay, it is the very absence of evidence which determines the question. And so, because after fifteen or sixteen centuries no ancient British iron has developed an anti-corrosive property superior to anything ever manufactured, *savans* repudiate the fact of its existence. Iron tools manufactured in the neighbourhood of Winco-camp might have been used in this very construction. It is a probable surmise that when the De Lovetots were lords of Sheffield (Roger De Busli was the first Norman proprietor after the Conquest), and constructed a mill (that great necessity of life), and built a bridge over the Don, and a hospital for the sick, that crafty men were producing there such articles of steel as the times required. And yet, as we have before seen, steel is but converted iron. If not smelted on the spot, where did they get the iron to convert? It is highly probable that when Richard De Builli granted those four forges for smelting and working iron, to the monks

* After a careful survey of these interesting works, I feel inclined to give them a Roman origin, and to consider the ramparts more in the light of Roman roads through a marshy country than as means of defence.

of Kimberworth, that the trade of Sheffield absorbed a great share of their production. Moreover, under the powerful De Furnivals, who obtained a weekly market for Sheffield, greatly enlarging its trading facilities, it is reasonable to infer that the inhabitants had gained some distinction by the manufacture of articles from steel. But we have really no historical grounds for all such inference. Strange, but true, old Chaucer is the earliest historian of the Sheffield trade, the information he gives us being all contained within one single line—

“A Shefeld thwytel bare he in his hose;”

Proving, however, an important fact, that in the 15th century Sheffield had attained a national distinction for the manufacture of “whittles,” which were a long sheathed knife, used for every available purpose, from cutting a piece of bread to cutting a throat. The Earl of Shrewsbury (a later lord of Sheffield) presented, in 1575, to Burghley, “a case of whittles,” with an intimation that they were “such fruictes as his pore country afforded with fame therefrom.” We have evidence also, that not only in “whittles” but in other instruments of steel Sheffield was A 1. At the battle of Bosworth Earl Richmond’s arrows were celebrated above the rest, being long, sharp and strong: these were manufactured at Sheffield. Still, at this time, and for two centuries afterwards, Sheffield was poor and insignificant in comparison to her present goodly proportions. We need no stronger evidence of this fact than the following copy of an original document:—

“By a survaie of the towne of Sheffield made the second daie of Januarie, 1615, by twenty-four of the most sufficient inhabitants there, it appeareth that there are in the towne of Sheffield 2,207 people: of which there are 725 which are not able to live without the charity of their neighbours. These are all begging poore. 100 householders which relieve others. These (though the best sorte) are but poor artificers: among them there is not one which can keep a teame on his own eand, and not above tenn who have grounds of their owne that will keep a cow. 160 householders, not able to relieve others. These are such (though they beg not) as are not able to abide the storme of one fortnight’s sickness, but would be thereby driven to beggary.—[How many are there in the town now who

would be reduced to the same extremity by the same circumstances?]-1,223 children of the said householders, the greatest part of which are such as live of small wages, and are constrained to worke sore, to provide their necessities."

For a hundred years or more, after this survey, the town made but little progress, either in population or wealth. The people of Rotherham say their grandfathers told them that letters were usually addressed "Sheffield, near Rothertam," and avow that the old gazetteers describe it as "Sheffield, a village near Rotherham."

There is here and there, it may be, an individual who has never been to Sheffield;—knows there is such a place, heard a great deal about its being dismal and dirty, but never saw it. Well, for once in his lifetime he must visit the Metropolis of Steel. Starting either from Masbrough or from Rotherham, he soon arrives at a station called Brightside; from thence into Sheffield, on both sides of the railway, the mass of manufactories is appalling. There are also many thousand roods of new buildings in every stage of erection. Vulcan surely must have fixed his head-quarters in Sheffield. And what a large stock-in-trade he holds. Here are immense piles of pig-iron ready to be melted, and great stacks of blister-steel, with huge ingots of Bessemer steel, ready to be forged or rolled: of all this our visitor gets a passing glimpse as he is whirled by the railway train into Sheffield.

I believe that at the present time (August 1866) Sheffield is in a better condition as regards trade than many other large towns. Commercially speaking England just now is passing under a cloud. For about three* months the Bank rate of interest has been ten per cent. Week by week witnesses the downfall of gigantic manufacturing and trading establishments; four or five banks have suspended payment, with liabilities amounting to twice as many millions; while people have been compelled to throw upon the market tangible securities at a very great sacrifice. And what is the cause of all this? In-

* During the last few days, since the above was written, the Bank of England has reduced its rate of discount to eight per cent.

sane speculation—nothing else. Three months ago, a vast body of speculators—constituting what was called the rig—thought that by buying up the great bulk of pig-iron, at any rate, they could gain a monopoly in the article. They did succeed in advancing the price to 70s., yea even 77s. per ton; and in their mad enthusiasm thought of dictating their own terms to the great body of consumers. But the general course of events did not happen to be propitious, things went wrong on the continent, things went wrong in many of the great financial and discount houses, while not a few of those colossal trading establishments have collapsed, after going sadly wrong. The result is that there is pig-iron by thousands of tons (bought at those extreme rates) in the market, now seeking customers at a reduction of one-third. At the present time, with the present prices, it may be that the iron manufacturers do not find their trade remunerative, and as the workmen will not consent to a reduction of wages scores of furnaces in Scotland and the north of England are “blown out,” while above ten thousand furnace-men and puddlers are bereft of employment. I wish the cloud would pass over, and the golden sun would revive and invigorate our drooping trade. But, my dear sir, what means that emphatic grunt, and that self-satisfied toss of the head?

READER: I knew how it would be—I said so from the first.

MYSELF: What did you say?

READER: That Limited Liability Companies would ruin the country.

MYSELF: Then you said a very foolish thing. Let us argue the point calmly and rationally. You and I can remember the commencement of our first railways; we can remember, also, a time of panic, when the crash came, and a howl of anguish arose, from the great commercial heart; all this latter was owing to mad and wicked railway speculation. But who will say that railways have been the ruin of the country?

READER: The illustration may be very melodious to your ears, but on mine it grates. Perhaps you were bitten by the railway mania?

MYSELF: No. Have you been taken in by the glosing prospectus of some Joint Stock Company, Limited?

READER : I've had more sense.

MYSELF : Personally, then, we should both of us be in a position to reason upon this great question without prejudice. But you knew the turn things would take from the first.

READER : My argument is this.—The philosophical idea of limiting men's liability is radically unsound ; and the greatest curse to England came when such an act passed our legislature. I never heard one good argument in favour of Limited Liability ; on the contrary any one may see that the system takes its rise in national gullibility, and ends in a system of legalized plunder.

MYSELF.—My dear sir, philosophically speaking, this is not argument, but a dictum. Give us the premises upon which you base such a conclusion.

READER : Well, if you will have them, here they are—and, first, let us look at the manner in which these companies are got up. There is a large, and, it may be, old-established, but insolvent firm. The proprietors are men of influence ; they engage two or three experienced fowlers, who decoy raw capitalists by the hope of enormous dividends.

MYSELF : They frequently guarantee a liberal dividend for a number of years.

READER : Wait a bit. The plant and stock-in-trade of this established firm are valued at three or four times the amount they would fetch under ordinary circumstances : a very large sum, also, is put down for goodwill. The old proprietors, after taking a considerable number of shares, pocket a surplus more than equal to their vested interest, and, it may be, receive a very liberal salary annually as managers. As you say, a maximum dividend is guaranteed for two or three years, and, with plenty of capital the resuscitated concern speeds gloriously, alterations and extensions are carried out on a very extensive scale, for, as the money belongs to no one in particular, there is great recklessness in spending it. The apparent prosperity of a few large firms stimulate a multitude of smaller ones, all eager to be incorporated upon the fashionable principle of Limited Liability, and all rushing on in a mad scamper to get rich, until some convulsion of the money

market puts the drag on reckless trading, and the firms are wound up in chancery.

MYSELF : This argument will apply equally to all reckless trading, whether conducted upon the principle of limited or unlimited liability. Business is constantly subject to vicissitudes and panics, which weed out all that is bad or unsound, but strengthens what is good.

READER : I cannot get you to comprehend the gist of my argument.

MYSELF : Then I must be very blind.

READER : There are none so blind as those who will not see. Look here—as a rule people with little responsibility are in the highest degree careless, oftentimes reckless. The managers and shareholders of such companies may contract debts to an unlimited extent, and yet be liable only for the amount of their shares. Do you not see that the system offers a premium to careless trading, or something worse ?

MYSELF : Indeed, I do not ; for the only legitimate interest the shareholders can have is to secure a profitable investment. A man is not the less careful of his thousand pounds because they do not happen to represent all that he is worth. If he joins other capitalists in accomplishing what no one singly would have either the courage or the means of doing, it will be their united interest to make the concern prosper. Union is strength.

READER : There are not wanting men—aye, and what the world calls shrewd men—who will run a little risk for the sake of extraordinary profits: these are ready to launch an undertaking with the full expectation of eventually seeing it founder. In a few years, it may be, they will get their money back, and something more ; afterwards the crash comes, and the public have to pay for their defalcations.

MYSELF : To my mind this is the most foolish argument of all. If a company can stem the tide of prejudice—which the force of adventitious circumstances has, just now, accelerated to a perfect flood ; if it can continue in operation until the shareholders have received back in dividends all their capital, and something more, the probabilities are that it will become consolidated, and the advantages multiply themselves

year by year. It is said that the man who produces two ears of corn where but one grew before is a benefactor to his race ; then how much more good does he do who develops the trade to find the money to buy the corn after it is grown. There are individual men who have gained, by their own bold but practical ideas a great position in trade ; gained much wealth, even to satiety ; they desire repose, for other purposes, and more enticing honours await their acceptance. The name and connections of the firm are a tower of strength ; and there are fresh men, with new impulses, ambitious for trade. Why should it not be so ?

But, a truce to arguments, let us see what two leviathan establishments can accomplish on the principle of limited liability.

ATLAS WORKS,

(JOHN BROWNE AND Co., LIMITED.)

A stranger may be pardoned if he takes his first impressions of Sheffield from the appearance of the railway station by which he enters it. Coming from the north, he must of necessity make his entrance at the Wicker Station of the Midland Company, which is the embodiment of everything mean and dismal and inconvenient. A great moral obligation rests with the directors of such an important railway to remove this standing libel from the town. It may be pleaded in excuse for inferior accommodation that Sheffield is not placed upon the trunk line of the Midland Company, but is simply the terminus of a short branch from Macclesfield and Rotherham. This is so ; and yet when we look at the immense traffic—human, mineral, and merchandise—transported to and from this place, the requirements demand from the Midland proprietary a more equitable acknowledgment. But enough on this head ; let us jostle through the awkward place as best we can, and make our way into Saville-street, past the imposing Cyclops Works (of which we shall have plenty to say hereafter), to the greatest of all great firms connected with the Metropolis of Steel. Being now fairly surrounded with factories, the angles of which seemed

at an interminable distance, I enquired for the entrance into John Brown & Co.'s Works. "Keep to the left for about five hundred yards, and you will see the arched gateway," said my informant; "John Brown is close behind you." I turned to look, when a rather portly man, a little under the middle height, passed us. His countenance spoke much more of comfort and serenity than care; indeed, there was about his whole bearing a quiet dignity as of one whom prosperity could neither make imperious nor vain. Judging from the breadth of his brow, and the circumference of his hat, he seemed to have a large head. I once remarked to an intelligent foreman that iron-masters and managers generally had large heads. How is it? "Well," said he, "it is because such heads have had to do a great deal of work;" and, it may be, this is a logical inference.

On the previous evening, when some miles away, I had posted a little note to the manager, asking permission to look through the Atlas Works; and now, after ascending a flight of steps into a magnificent office, ventured to make the request in person. There were half a dozen gentlemen sitting round a spacious table; but there was not a face which I had ever seen before, except the now uncovered head of him who was pointed out to me in Saville-street as the founder of the firm. Yes, I had their full consent to see everything about the works that might interest me, and write about anything, just as it appeared. A clerk from one of the offices was sent for to act as a guide, and when he appeared received certain instructions. "Shew Mr. — through every part of the works, not hurriedly, but giving sufficient time to observe the operations." So we went on our way.

One may form some idea of the vast trade carried on here when told that the Atlas Works cover more than twenty-two acres of ground (almost entirely built upon), and that there are about 3,000 hands regularly employed. Two thousand tons of iron floorplates are laid in a few of the shops. The mass of buildings contain 53 steam-engines, ranging from 5 to 150 horse power each. It is computed that 1,200 tons of iron and 5,000 tons of fuel are required weekly at the Atlas Works; while the amount of carriage paid to the Midland Railway Company alone is upwards of £30,000 per annum.

I had scarcely left the office before an important controversy arose in my mind, for thought is quick. A voice (which must have come from the Genii of Common Sense) whispered—Now be careful; for how can you, a poor literary waif, presume to give the public any correct ideas respecting the mechanical productions of iron and steel. To back the caution memory supplied me with a case in point. Sturdy Sam Johnson was once asked why he defined “fetlock” as the knee of a horse. “It was ignorance sir,” he replied, “nothing else.” Here are many hundreds of skilled workmen, who know their departments thoroughly, having been years at the trade; and yet even they would find great difficulty in explaining by words what they understand so well in practice. Then how can one like myself, with none of this practical experience, give any adequate description of these works, merely as the result of two or three hours’ observation?

Our first visit was to the furnaces, numbering about 60 in all, where the raw or pig iron is puddled.* By this process, as we have before seen, the “boiled” metal becomes oxidised; then, after repeated stirring, when it has acquired a thick, pasty consistence, the contents of each furnace is divided into two or more balls, and shingled under one of the thirty-six ponderous steam-hammers. The “blooms” are re-heated, and again shingled, for the iron acquires additional value the more it is compressed and condensed. The “billets” are again re-heated and drawn under powerful rollers of graduating dimensions, and the iron is manufactured into bars or sheets, according to the purpose for which it is designed. Before the iron is reduced to its perfect malleable condition, it will have lost at least 15 per cent. in weight; for during the processes of shingling and rolling great quantities of scoria are brought to the surface and expelled. The furnaces here are capable of turning out above 300 tons of iron per week, and there are in the mills fifteen “trains,” comprising about 40 pairs of rollers.

* It appears that Mr. Brown, together with his partners, Messrs. Ellis and Bragge, first introduced the manufacture of iron into Sheffield, which they did about nine years ago, at the Atlas Works; although at this period the latter did not reach one quarter of their present dimensions.

I understand the Company merchant a quantity of boiler-plates, &c. ; still more than three-fourths of the iron manufactured here is used on the premises, either in armour-plates, or for conversion into steel.

Messrs. John Brown and Co. have a world-wide reputation for the manufacture of armour-plates—immense iron walls for our navy and coast defences. It was not possible that I could see one particular plate begun and finished, since the various processes extend over several days ; but I witnessed some of the more important operations, saw a number of plates in various stages of completion, and had such explanations given as enabled me to form a general conception of the entire rationale. An immense ball of puddled iron is taken from the furnace, and after being helved or shingled, is rolled into a slab about 6 feet long, one foot broad, and an inch thick. Then, while hot, this slab is sheared into two equal parts. Strange as it may appear, above a hundred of such slabs will be required in the manufacture of a single plate. Four or five of them are piled together (cross-wise, so that the fibre shall run in different directions), heated, and rolled into one plate about four feet square. The piling, heating, and rolling is repeated, until the whole are reduced to four “plate-moulds,” each measuring about 8 feet long, 3 feet wide, and 2 inches in thickness. These four immense moulds have finally to be rolled into one plate.

It is wonderful to see the appliances of machinery. The Atlas Works contain 15 travelling hoists, running on iron girders, each of which can lift upwards of twenty tons. There are, also, about 30 stationary cranes ; besides several steam travelling cranes upon carriages. Truly, it requires the highest stretch of ingenuity, and much strength, to deal with enormous masses of iron like those before us.

When I arrived in front of that great furnace, the “moulds” composing an entire armour-plate were being heated. But the question arose, how were they got into the furnace ? So far as I understand it the method adopted is as follows :—Those four “plate-moulds” are severally swung to the rear of the furnace by a powerful crane, and piled upon a carriage. The front and back doors of the furnace are opened, and the carriage with

its contents drawn in. The four-fold plate is then lifted by means of levers to its pedestal of fire-bricks, and the empty carriage withdrawn. The doors are then closed, every interstice being filled up with sand, and the furnace heated. It should be observed that plugs were placed at the corners, between each strata of iron, so that the fire may penetrate through them separately ; and yet it requires something like six hours of intense heat to reduce those combined " moulds " to a welding condition. Fortunately I was in time to witness the next, and most interesting part of the operations. The plate-mill contains two or three pairs of rolls, measuring about 8 feet long, and nearly 3 feet in diameter ; while the staff of workmen numbers about seventy. By-and-by a carriage is brought, and fastened to the front of the furnace. An immense pair of tongs, requiring the strength of four men to carry them, are placed upon the carriage. One end of a heavy chain is passed round the upper roller, while the other end, having a hook attached, is made fast to the pincers. Now, mark the result. Those pincers are passed through a little door, and made to grip the red-hot metal ; the mouth of the fiery furnace is opened, when forth issues a great volume of flame ; the roller revolves, and draws its load gently on to the carriage. And now the chain is withdrawn from the roller ; the carriage is liberated ; about fifty men attach themselves to the chain (unconcerned that the huge mass spits fire, sending out far and wide a furious glare), and drag the stratified plate to the rolls. Then what a grip ! The metal is drawn through, as if it were but dough. Crack, crack, thud ! The rolls go crunching round with furious noise, scattering the red-hot hail. Soberly speaking, until the glowing mass had gone once through the rolls, I was glad to keep at a respectable distance, while the repeated concussion reminded one of nothing so much as a volley of musketry in a closed room. But what admirable coolness, the results of much skill, those workmen seem to display ; for no sooner has the compressed mass once passed through, on to the opposite carriage, than the rollers are immediately reversed, drawing the plate backwards ; and so on several times repeated, while streams of water are poured upon the

plate, and brooms are very freely used to remove the surface scales. It may be, that a great blister, or air bubble rises on the plate; a punch attached to a long handle is struck by a heavy hammer into the hissing iron, and the "blob" soon disappears. After being sufficiently rolled, the solidified mass is straightened by rolling it upon iron floor plates. It thus remains for many hours; then, when sufficiently cool, immense planing machines are employed, which square the edges to as great a nicety as if the material had been soft, like wood. As near as I can compute, the plate before me would measure about 10 feet long, by 3 feet 6 inches wide, and 4 inches in thickness. The firm have manufactured armour-plates nearly 20 feet long, 7 feet broad, and above 12 inches thick, the weight being about thirty tons.

And now let us see what becomes of the remainder of puddled iron.

We have already described the ordinary method by which iron is converted into steel; how the bars of malleable iron are piled in firestone troughs, between alternate layers of charcoal; and how, after several days' roasting, the bar-iron becomes impregnated with carbon. You understand it? The high temperature of the furnace (about 100° Wedgwood) evaporises the carbon, and also opens the pores of the iron; thus absorption takes place. When in the course of ten or twelve days the bars are taken out, they present a brown, charred appearance, with numerous air bubbles or blisters on the surface. Hence the name of blister steel. Still the process of "cementation," as it is called, cannot secure a uniform absorption throughout all the bars in the same trough, nor even in every part of the same bar. To rectify these inequalities, and to give a more perfect homogeneity to the entire mass, the bars of blister steel are heated, and tilted or hammered. You understand it? The heating and hammering is repeated, when two or more bars are welded together; hence the names "double," "single," or "half-shear" steel. The Atlas Works contain eighteen converting furnaces; each furnace of two troughs capable of producing about 30 tons of blister steel. I forget how many tilt-hammers there are.

Cast steel, as we have before seen, is simply blister steel melted. By this process the mass becomes very homogeneous, for the carbon is thoroughly disseminated. The melting furnaces are built underground, and are fed with coke. There are holes in the floor (covered with fire-proof lids) through which the crucibles are put in and taken out. Let us recapitulate the *modus operandi*. First of all, the empty pot, minus the lid, is lowered amongst the red-hot coke in the furnace. When at a white heat, broken pieces of blister steel (and, I believe, either an oxide or carburet of manganese) are poured in ; the aperture in the floor is closed up and the melting begins. Two or three hours will elapse before the steel is properly melted ; but the whole process requires great care and discrimination. A casual spectator will be most interested in the process of "teeming." Here a great deal of coolness and dexterity are required to lift out the fiery pots, and pour the dazzling contents into ingot moulds.

Cast steel is very hard, and capable of receiving a high polish ; it is, therefore, best adapted for the finer descriptions of cutlery.

Whilst writing these meagre sketches of an important trade, it has more than once struck me that the orthodox processes of steel manufacture are very defective, and will be soon almost totally superseded. First of all comes "puddling," to deprive the iron of carbon ; and then by a slow process (*cementation*) the iron is carbonised afresh. Why this roundabout system ? The difficulty appears to be in assimilating the true proportion of carbon, which must not exceed one and a quarter per cent. ; while pig-iron contains about 5 per cent. Now if the elimination of carbon in puddling furnace could be checked at a certain point, one would think that nothing might be required but to get rid of the scoria and other impurities.

At a meeting of the British Association at Nottingham, just concluded, a paper by Mr. R. Mushet was read "On the treatment of melted cast-iron, and its conversion into iron and steel by the pneumatic process." The writer claims a priority of invention over Mr. Bessemer in the main features of that process which bears the latter gentleman's name. There is some evidence

that nearly twenty years ago the Mushets succeeded in decarbonising iron direct from the smelting furnace by means of the blast, afterwards pouring in a quantity of melted spiegel eisen ; but although their metal was then brought into a condition resembling crude steel, it became at the same time too highly oxygenated, and for all practical purposes almost worthless. Now it is quite obvious, as Mr. Mushet would contend, "that steel of a marketable quality might have been obtained, simply by adding some metallic manganese." If subsequently Mr. Mushet did succeed in producing large masses of steel by the union of decarbonised with spiegel iron, and lost all the benefit of his invention from an inadvertence in the payment of stamp duty, then is the whole question fairly open to discussion. Mr. Mushet, however, never appears to have advanced further than the ordinary appliances of melting pots, and never thought it possible to maintain "a tuyere beneath a heavy column of melted cast-iron." But this latter result forms the chief characteristic of the Bessamer process. It was not until after years of persevering energy, displayed in numerous experiments, that the renowned process of converting crude into malleable iron, and also into steel, was accomplished.

When we arrived at the first and oldest converting house, the process was completed ; the vessel had just delivered its charge, and was turned with its mouth to the ground emptying the refuse scoria, "Never mind," said my guide ; "We may have better luck at the new converting house : " and so it turned out, for on arriving at the place indicated, a bright stream of melted metal was running down a trough into the neck of the lemon-shaped converter.

But before we describe the Bessamer process, it will be necessary to notice the machinery and appliances in use. First of all let us look into the engine-house. Here are two horizontal engines coupled, with an united power of 60 horses ; these are entirely for the blast. There are, also, two small upright engines coupled ; these are to work the hydraulic ram. Close by are four air-furnaces, each capable of melting about three tons of pig-iron per hour, while at a short distance is another furnace for the melting of spiegel iron only. In the

spacious shop or converting-house is a sunken circular pit, something like twenty feet in diameter, and sixteen feet deep. Within are the two converting vessels (one only being used at a time, while the other undergoes repair) which are in shape something like a chemist's retort, with the neck broken off very near the bulb. They are made of strong boiler-plates, lined with gaster, and are mounted on axes in the centre, so that by means of a crank worked by hand, the converter may be turned top or bottom upwards, or made to describe quarter of a circle. In each converter, at the reverse end from the spout, are seven holes, each about four inches in diameter, and fitted with a fireproof tube, the whole terminating in an iron neck with a single wide orifice, which latter can be easily fixed by cotters, &c., to the blast pipe. Moreover, in the centre of this pit stands the ram, which is worked by a hydraulic press. At the top of this upright pillar or ram is a horizontal beam, capable of moving all round the pit. To one end of the beam is attached the cauldron, or "receiver," as it is called, while at the other end there is a counterpoise. At the circumference of the pit, ranged in a semi-circle, are the ingot moulds, of varying dimensions.

Now, let us observe the mode of operation. By means of a crank, the converter is brought down with its neck in a horizontal position, the furnaces are tapped, and the red-hot metal runs down the spout into the vessel. The stream is stopped just when the slag begins to appear. Presently the converter is tilted, as if by an unseen power, into a verticle position, with the neck under an upright shaft or chimney. And now the blast is put on in force, and a novice might think the vessel was belching forth its entire contents in an eruption of sparks. For a short time the sparks are large and gross, accompanied by a lurid violet-flame. In about five minutes, when the slag and grosser impurities have been thrown out, a huge column of bright yellow-flame goes fiercely upwards; the corruscations grow more bright, and the roaring sound increases. To one like myself, who had never witnessed such a process before, the whole scene had something like a fascination. But, Oh! said I, if the devilish thing should burst! "It won't burst," replied my guide. But supposing the vessel was to swing

backwards, what then? "Why then," said he, "it would be all up with us here." I concluded that it would. But see, the flame assumes a dazzling whiteness—a brightness equal to the electric-light, and scorching as the sun. The heat becomes intense as the carbon unites with the oxygen; while the roar is like Niagara. On a dark winter's evening, the whole operation will seem like an embodiment of the supernatural. Milton, in his imaginary Palace of Hell, has scarcely developed a grander sight. And now, Mr. George Brown (a nephew of John Brown, Esq.), who has the management of this process, came and looked on. Although it usually requires about twenty minutes to thoroughly decarbonise the iron in the converter, still, a practiced operator can tell by the eye, from the appearance of the flame, better than by his watch, when the process is completed. At a given signal from the manager, the blast is checked, the vessel is tilted with its nozzle in a horizontal position, as before, and soon another stream of melted metal (the *spiegel eisen*) runs down another trough and mixes with the decarbonised iron in the converter.

Thus, in about twenty minutes, the mass has been thoroughly decarbonised without a particle of fuel, and becomes far purer malleable iron than any which could be produced in the puddling furnace. There is this singular difference in the result of the two processes, however, that whereas by this blast the fluid condition of the iron is entirely preserved, that in the puddling-furnace assumes a thick, pasty consistence. Bessamer has apparently another advantage over puddled iron, viz., in an equality of condition; there are in it no partially decarbonised bits, or lumps of cinder, necessitating their expulsion by hammering and rolling.

The *spiegel eisen*, now running into the converter, is to introduce into the pure iron the one per cent. of carbon necessary to transform the mass into steel. One might suppose that if the process of decarbonisation could be checked at some particular stages, various qualities of iron and steel might be produced by this process; still, as a practical result, it is thought best to entirely decarbonise the iron operated upon, and afterwards add the requisite proportion of carbonaceous material.

And now commences the process of teeming, which requires a great deal of care. The hydraulic ram is brought into requisition. The huge metal bucket (lined with ganister) attached to one end of the beam, is brought under the converter, the latter is tilted with the spout downward, and the contents are poured into the cauldron. At the bottom of this receiver there is an opening, fitted with a fire-proof stopper ; and as the vessel is brought in succession over the ingot moulds, the orifice is opened and shut as required. When the masses of steel have partially cooled, the moulds are drawn upwards by the hydraulic ram, and afterwards the ingots are lifted out of the pit. The size of these ingots is regulated according to the purpose for which such masses of steel are required, and may range from 1 cwt. to 8 or 10 tons weight each.

I understand that about 8 tons of metal is usually converted in one vessel at a time, the process being repeated about eight times in the day of 24 hours ; so that, allowing for accidents, &c., the two converting-houses at these works will produce upwards of 100 tons of Bessamer steel per day.

The productions of steel, which employ about two-thirds of the hands, are heavy cranks and axles, conical steel shot for rifled guns, some of which are forged above 100lbs. weight ; locomotive and carriage springs ; and, more particularly, steel rails, the demand for which is increasing week by week.

Just before leaving the works, a dark man, with a very foreign appearance, passed us. "See," said the guide, "that is a Russian Inspector. We have now a contract on hand for the Russian Government."

CHARLES CAMMELL AND CO., (LIMITED).

THE CYCLOPS WORKS.

The Cyclops form another square of those immense works which skirt the Midland Railway, and abut upon Saville-street. Thirty years ago the surface of this district was brown and bare, relieved with patches of mouldy green herbage, which did not yield a large annual revenue. Not a house was to be seen. That was the time to speculate in landed property. "It could not be bought!" I forgot—it could not be bought. This common formed the addenda of estates which have since yielded to lordly proprietors the richest sources of income. Thus it is that our grand old feudal inheritors have profited by the shrewd business skill and the horny hand of the industrious. Then, who will contend now for a separate class interest, or isolate himself from the general community?

In 1843, Mr. Chas. Cammel began to lay the nucleus of these great works, upon those bare fields. At that time the venture was thought a bold one—not three or four roods, but as many acres of land covered with buildings. People shook their heads, and said the works were too unweildy ever to be managed; a sufficient trade could never be found to employ such great works. Why, in their grandfather's time, Sheffield was thought to be doing a prime trade when it could send two tons of steel to Birmingham in a week; their great grandfathers felt proud when a string of pack horses, laden with cutlery, would leave the town about once a month for London; and, although the demand for manufactured steel and cutlery had vastly increased since those days, still there were limits to be regarded, and overproduction would now inevitably prove their ruin. The sceptics prophesied falsely, business was found; instead of the accommodation being too large for the trade, the trade soon became too vast for the accommodation. Extensions and enlargements went on year by year, until, in lieu of four, the Cyclops Works

covered nearly fourteen acres. But what are they now, as a Limited Liability Company, with a nominal capital of one million sterling, and upwards of 3,000 workmen? We shall see. First of all, I would take this opportunity of presenting my acknowledgments to Mr. Geo. Wilson, the general manager; also to his brother, Mr. Alex. Wilson (who acted as my guide), for some valuable information respecting the Cyclops Works. It could easily be seen that my guide was proud of the Cyclops. "They are almost the oldest works in Sheffield," said he; "they have gone on steadily increasing from the commencement, and now form one of the finest establishments in Europe." A great deal has been written lately, in some London journals, about the superiority of foreign steel works; but such writers are pitifully ignorant respecting the magnitude and productions of similar concerns in England. The works at home are doing more wonderful things than any achieved by continental establishments, although in some of the latter private enterprise is supplemented by government aid.

It appears that there are here 50 steam stationary engines; 50 steam hammers of all weights, up to 25 tons; besides an hydraulic press of twelve hundred and fifty tons, which latter is employed in heavy steel forging for cannons, &c.; consequently an enormous number of boilers will be required to supply steam for all this machinery. There are also fifteen rolling mills.

About eight years ago the manufacture of iron was introduced here upon a large scale. At present upwards of 60 puddling furnaces are employed, with all their requisite machinery. Great quantities of locomotive plates are rolled and finished ready for use; indeed, as the works include both iron and brass foundries, anything belonging to the construction of a locomotive or stationary engine can be produced here.

An important branch of the iron trade, as might be anticipated, is the production of armour plates, about 200 tons per week being manufactured at the Cyclops Works. The large planing shop in connection with this department deserves particular attention; it contains 20 machines for "slotting" and "planing" armour plates; while a travelling crane, capable of lifting 20 tons, is in frequent requisition. Plates fourteen inches thick

have been rolled at these works ; but the average number range from four-and-a-half to six inches thick. When these immense plates are securely bolted together, with from twelve to eighteen inches of timber behind them, one would think that they must be invulnerable. After the Warrior was floated, our naval architects felt secure, and said, confidently, that she was invulnerable to the best guns and the heaviest shot. But no sooner had armour plates attained this high state of perfection than the restless genius of mechanics went off in an opposite direction, and now the case stands thus—ordnance and projectiles *versus* armour plates. For two or three years past our ears have been deafened with the competition of guns, and the public have been in doubt whether the palm should be awarded to Whitworth or to Armstrong. At the present moment our attention is directed from the gun to the shot and shell ; it is the projectile which does the execution. During the present month a series of experiments have been made at Shoeburyness, which have induced many newspapers to say that the plated sides of the Warrior can afford no more protection than basket work. Gentlemen of the press are apt sometimes to indulge in hyperboles. Six inches of solid iron, with eighteen inches of teak, all well bolted together, can resist an enormous amount of battering. For two or three years our Warrior targets resisted the most powerful artillery which could be brought against them ; and we must remember that a 500 pounder on *terra firma*, at 300 yards distance, must be far more effective than anything which could be predicated in naval warfare. It is not so now, however ; for, as recent experiments have demonstrated, the Palliser shot and shell cut clean through a target far stronger than the Warrior's side. Here we had armour plates 8 inches thick, backed with 18 inches of timber, and an inner wrought-iron skin, the whole mass being strengthened with the most powerful iron girders and bolts which could be devised. A nine-inch wrought-iron breech-loading Woolwich gun was employed, the charges of powder averaging 43lbs., and the shot and shell about 250lbs. weight. Some steel shot, made by Messrs. Firth, of Sheffield, were tried, one of which penetrated the target to the depth of five inches, and caused one

of the bolts to start. Some flat-headed projectiles were then used, but the utmost damage these could do was an indent of six inches. Then came the crowning trials with Palliser shot and shell, which, I believe, are made simply of good cast-metal run into moulds, and chilled with streams of water; a process similar to that employed in the manufacture of anvils. [Query. What superior powers of resistance would armour-plates acquire if they were chilled in the same manner?] Most of the chilled shot went through the 8 inches plate, and buried themselves in the timber. But the shells were terrific; one pierced the target to the depth of 12 inches; another went in 19 inches; while another, after passing clean through the target exploded in a mass of timber about twenty feet beyond. Thus we see that the invincibility of our armour-plating is a thing of the past. If the old supremacy is to be renewed, armour-plates must either possess greater thickness, a better method of construction, or a quality of metal very different to simple malleable iron. The great firms engaged in this manufacture are therefore now put upon their mettle to invent something which shall resist Major Palliser's chilled shot and shell.

With the Cyclops, as in other leviathan concerns at Sheffield, iron is made subsidiary to steel. Twenty converting furnaces are here continually going, day and night, for the production of cement steel, the greater part of which is afterwards made into cast-steel, upwards of 400 melting furnaces being employed for this purpose. Eight hundred tons of Bessemer steel can now be produced at the Cyclops works weekly.

Bessemer steel promises to work a revolution in the trade; it can be created in such a short time, at comparatively little cost. A hundred tons of blast steel can now easily be made by a single firm in one day. But it costs a great deal, both in time [and money, to produce a hundred tons of steel by the old process; first, in the manufacture of crude iron into malleable bars; secondly, in the conversion of these bars into blister steel; while, thirdly, it will require upwards of two thousand crucibles, with all their accompaniments of workmen and coke fuel, before the estimated amount of cast-steel can be delivered in ingots. No wonder

that the prices of best blister and cast-steel should range from £25 to £50 per ton. It may not be possible ever to produce by the Bessemer process a quality equal to the best cast-steel; so that for tools, cutlery, and any small articles requiring either a sharp edge or a high degree of polish, the latter will still secure a demand. It is in the heavy trade, in departments once exclusively confined to malleable iron, that the advantages of Bessemer steel are most apparent. Take, for instance, the single article of locomotive rails, a trade in which there is a large return but a keen competition. Iron is cheap now, having fallen in price more than one-fourth during the last few months. I hear that some large contracts have been taken for rails under £7 per ton; but since steel tyres for locomotive engines have come largely into use, these malleable iron rails do not last long. It used to be that manufacturers would guarantee their rails for five or seven years; but since the traffic has so largely increased, and steel tyres make such havoc with the lines, no one can be found to undertake similar contracts. There is one eminent firm near Sheffield which has suffered to a considerable extent in honourably fulfilling such engagements. But the time is not far distant when all the more important lines will be renewed with steel rails, for while those of Bessemer steel cost scarcely a third more than the price of malleable iron, they last fully six times as long; so that the saving is apparent.

Bessemer-steel, produced at the Cyclops Works, is chiefly made into rails, both here and at the company's new concern at Penistone. Despite the cost, however, cast-steel is still frequently used in masses for cannon, shot, and shell, railway tyres, and various heavy forgings for engineers.

At these works there are two fine mills for the production of tyres alone, some of which range up to 12ft. in diameter. There is also another mill, running night and day, for the rolling of steel ship-plates.

The manufacture of locomotive, carriage, and waggon springs has, during the last ten years, been very extensive, and most profitable. About 120 tons of such springs are made here every week. I was much interested in the various processes:—to see how the steel

is rolled into bars of the required breadth and thickness ; then cut into lengths, as if the bars were card-board ; to witness how these separate graduating lengths are bent by hand into a curved form ; how easily the holes are punched, and the combined spring is studded ; what care is exercised afterwards in the hardening or tempering, and how, finally, each spring is tested by hydraulic machinery. Although some of these springs are made strong enough to carry 20 tons weight, they can never be put to a severer test than what is employed at these works, being frequently pressed quite straight ; still, no sooner is the weight removed, than the elastic thing regains its original curved position, as a good spring ought.

Buffers, with conical and volute springs, form another important branch of manufacture.

The making of files is also very extensively carried on here ; more than a thousand dozens being turned out weekly.

Several times during our survey, I noticed that the foremen of various departments drew the attention of my guide to the quality of certain bits of broken metal. There are good reasons for thinking that officials at the Cyclops Works are practical metallurgists, relying for success upon the quality of their iron and steel. To this end scrupulous care is shown in examining and testing every production of importance. I remember that in the Exhibition of 1862, a machine was supplied by Charles Cammell and Co. for testing the strength of metals, and that it excited considerable interest. It appears, as a general rule, that malleable iron has a tensile strength three times that of cast metal ; and cast steel three times that of malleable iron. Good Bessamer steel is capable of bearing a tensile strain of 150,000 lbs. to the square inch.

STEEL BELLS.

If my object was to compile a Directory of the Steel Trade, it would be necessary to particularise twenty firms or more, each endeavouring to supply the market with productions a little better or a little cheaper than the rest. A mere glance at such extensive works as those conducted by the Jessops, Butchers, Burys, Firths (T. Firth and Sons and M. Firth and Sons), Eadons, Peaces, Hall, Spear and Jackson, Wilson and Co., Sybray and Co., Cockers, &c. would occupy considerable time. In giving a modest epitome of the steel trade in Sheffield, therefore, I can only dwell upon three or four firms, which may be a little more remarkable than the rest, either for the character or extent of their productions.

Naylor, Vickers, and Co., are an old Sheffield firm—perhaps the oldest of any note connected with the steel trade. They have works at Millsands and Wadsley-bridge, which are now being supplemented by enormous constructions adjoining the Midland railway at Brightside. The latter cover something like twenty acres of ground. In the production of blister and cast-steel, N. V. and Co. have to compete with many eminent local firms; but in one branch of trade they have a monopoly, viz., in the casting of steel bells. Bells! A capital book might be written on the history and influences of bells. Who first found out that a hollow metal vessel would make a musical noise when it was struck? Some man of the olden time. No doubt there were pots in existence before bells were ever thought of; and the fact that such pots did vibrate in sound might suggest the idea of making vessels for the purposes of sound alone. Bells are as old as—the creation? Not quite, but still very ancient. In Exodus (chap. xxviii.) are instructions for making Aaron's priestly garments. “And beneath upon the hem of it thou shalt make pomegranates of blue, and of purple, and of scarlet, round about the hem thereof; and *bells of gold* between them round about. A golden bell and a

pomegranate, a golden bell and a pomegranate, upon the hem of the robe round about." Again, Zacharia implies that war-horses were adorned with bells when he was alive, for the Prophet says :—"In that day there shall be upon the bells of horses, 'Holiness to the Lord.'" In the ancient Greek camp, at the dead of night, a patrol went to the various sentries, and tinkled a little bell. If the sentinel was awake he answered ; but if he was asleep and did not answer, then woe betide the sentinel ! I do not think this was a very judicious plan, particularly when a foreign invasion or civil war was threatened ; and it strikes me, just at the moment (although I cannot remember the epoch), that an ancient city was captured, or nearly won, by some insurgents seizing the opportunity after the bell signals had gone their round. A Greek Codonophorus used to walk in front of the corpse at a funeral procession, ringing his bell to advertise its approach, so that the *flamen dialis* might keep out of the way, and not be polluted by the sight. The Romans also made very great use of the bell. If that ancient race was not daily reminded, as we are now, when it is time to get up, or go to our work, or leave for dinner, still there were periodical times for them when the bell was rung ; thus, for instance, the bath hour was daily announced by the sound of a bell. The Romans adopted the custom of placing bells round the necks of cattle and sheep to assist them in recovering the strayed.

It is commonly thought that Paulinus, Bishop of Nola, in Campania, was the first to introduce bells in churches. This is evidently a mistake. To Paulinus may belong the merit of first hanging them on a kind of balance ; but bells were used in religious worship before the fourth century. Bede mentions their existence in England during the seventh century. Ingulphus tells us that Turketul, Abbot of Croyland, gave a large bell christened Guthlac to the abbey aforesaid. This Turketul died A.D. 870. His successor, Egelric, gave a whole peal of six bells, which were designation by respectable Christian names, and not by such vulgar appellations as "single bob," "grandsire bob," and "bob major." In the reign of Egbert it was commanded that every priest should sound the bells before going through

“the sacred offices to God.” About the close of the ninth century Kinseus, Archbishop of York, gave two great bells to the church of St. John at Beverley. By the Council of Enham (1011), it was required that a certain proportion of the “mulcts for sins” should be expended upon church bells. In the ancient Eastern churches bells were used at a very early period ; but when the Turks took Constantinople the practice of ringing was discontinued, lest such sounds should disturb the repose of souls, which they deemed to be continually hovering in the air.

The CURFEW BELL was introduced in England by William the First. Some say that it was intended to remind the conquered people of their serfdom ; but to this rendering we may justly take exception, since the custom prevailed in almost every country of Europe at the same period. The people were thus reminded to put out all their fires and go to bed, like honest, well affected citizens.

Then there is the PASSING or SOUL BELL. Bede attributes the origin of this custom to the following circumstance. When the Abbess of St. Hilda lay dying, a sister in a neighbouring monastery thought she heard the solemn tolling of a distant bell. She concluded that the Abbess was dying, and rousing all the sisters they repaired to the chapel, and sang a requiem for the soul of their mother. An old writer of the 12th century says :—“ When any one is dying bells must be tolled, that the people may put up their prayers, twice for a woman, and thrice for a man ; if for a priest, as many times as he had orders ; and at the conclusion a peal on all the bells, to distinguish the quality of the person for whom the people are to put up their prayers.” But the passing bell had formerly another purpose, besides advertising for sympathetic prayer. It is well known that evil spirits cannot bear the sound of bells ; therefore those malignant beings, who hover round a dying bed, eager to clutch the departing soul, are frightened away, or, at least, frightened beyond the limits of sound ; so that an active spirit may elude pursuit. It was on this principle, we infer, that a higher fee was demanded for tolling the big bell ; because the sound, being deeper, would be more effica-

cious. Wynkin de Worde, in his Golden Legend observes :—" It is said, the evill spirytes that ben in the regyon of theyre, doubte moche when they here the belles rongen : and this is the cause why the belles ben rongen whan it thondreth, and whan grete tempests and outrages of wether happen, to the ende that the feinds and wycked spirytes shold be abashed and flee, and cease of the moving of tempeste."

There did also exist what we may call the WARNING BELL at sea. Long before light-houses were thought of, mariners were warned of dangerous rocks by the sound of this bell, which, fastened to a buoy, swung backwards and forwards by the swell of the waves.

" The Abbot of Aberbrothok,
Had placed that bell on the Inchcape rock ;
On a buoy in the storm it floated and swung,
And over the waves its warning rung.
When the rock was hid by the surge's swell,
The mariners heard the warning bell ;
And then they knew the perilous rock,
And blest the Abbot of Aberbrothok."*

The ancient monasteries were replete with bells which were used in various offices, but chiefly sacred.

The Roman pontifical has a ritual of ceremonies concerning bells ; how they are to be baptized, anointed, blessed, exorcised and so forth ; since a great deal of power and virtue were supposed to exist in bells. Even in this hard, utilitarian age, do they not sound to us, at times, like sentient messengers, awakening peaceful thoughts, and sacred memories ?

" Those evening bells ! those evening bells !
How many a tale their music tells,
Of youth, and home, and that sweet time." &c.

* Southey, at the commencement of this ballad, quotes the following tradition from an old writer :—" By east the Isle of May, twelve miles from all land in the German seas, lyes a great hidden rock, called Inchcape, very dangerous for navigators, because it is overflowed everie tide. It is reported in old times, upon the said rock there was a bell, fixed upon a tree or timber, which rang continually, being moved by the sea, giving notice to the saylers of the danger. This bell or clocke was put there and maintained by the Abbot of Aberbrothok, and being taken down by a sea pirate. a year thereafter he perished upon the same rocke, with ship and goodes, in the righteous judgement of God."

What sweet time ? exclaims some crusty reader, with a sneer. Ah ! its many years ago ; but we remember it—Don't we, Tetty ? When you and I plighted our troth at that simple altar. “ Yes, love, we have had cause to remember it.” But you never once regretted it, did you, Tetty ? Tetty says she never did ; yet, to her, it seems but a short time since those marriage bells were ringing.

I never met with but one educated person who wished that bells might be silenced for ever. His plea was that they are vain relics of a popish age ; and now cause men to labour on the Sabbath. Poor man ! Did he never think how many thousands in scattered rural districts would sadly miss the old call to worship ?

Moscow was, and is now, famous for big bells. In the tower of St. Ivan's Church there was a bell weighing about 128,000lbs. A Czar in the olden time, gave one to the Cathedral of Moscow weighing 288,000lbs. ; but even this was outdone by a present of the Empress Anne to the same edifice, which was the largest bell ever known, measuring 19 feet high, 64 feet in circumference, and weighing 432,000lbs.

The bells of Nankin, in China, were so massive and powerful that they brought down the tower. We must remember that Chinese temples, however, are not very remarkable for strength. One of the bells is supposed to weigh 50,000lbs.

Weaver says, “ In the little sanctuary at Westminster, King Edward III. erected a clochier, and placed therein three bells for the use of St. Stephen's Chapel ; around the biggest of them were cast in the metal these words :—

“ King Edward made mee thirtie thousand weight and three,

Take me down and wey mee and more you shall find mee.”

But these bells being to be taken down in the reign of King Henry VIII., one writes underneath with a coale :—

‘ But Henry the Eight

Will bate me of my weight.’ ”

The great bell of St Paul's is a little under 12,000lbs. in weight, being nine feet in diameter,

This nineteenth century has not been remarkable for big bells ; the most noteworthy production, with one exception, being the great bell of Westminster, with which the name of Mr. E. Denison, jun., is so closely identified.

The exception, just mentioned, is a steel bell manufactured by this firm, and shown at the Exhibition of 1862. It weighs upwards of 9,000lbs. ; and although 170 crucibles of melted steel had to be poured into the mould, the whole time employed in teeming them did not exceed a quarter of an hour.*

The history of English steel bells is worthy of remark, because of the influence which these castings have exerted upon the steel trade of Sheffield. Twenty years ago, a German called at the office of Messrs. Naylor, Vicers, and Co., with a flaming prospectus, and a patent for steel bells. After some further negotiations the firm purchased this patent, although these shrewd men of business were not prepared to endorse all the sanguine expectations of the inventor. True, steel might be superior to bronze in sustaining violent agitation, or the vicissitudes of heat and cold.† True, steel bells might be manufactured one-third lighter, and more than one-half cheaper, than those regularly in use ; but still their introduction would naturally meet with strong prejudices both from professionals and the general public. Now, although Messrs. Naylor, Vicers, and Co. have turned out several thousands of steel bells since 1845, it was evident to those gentlemen from the first that the requirements for this branch of trade must necessarily be limited ; so that it would never pay to construct works upon a large scale simply for the manufacture of steel bells. But (an active mind is ever ready to deduce inferences) if it be possible to cast at once a bell weighing several cwt., why should not steel castings of heavy weight be applied to various engineering and mechanical purposes ? One of the partners told me it was this idea, and not any sanguine expectations about bells, which induced his firm to undertake the patent.

* I understand that this bell has since been hung in the Italian church of London.

† Only last week, the great bell at Geneva, called Clemence, which was rung on all important occasions, cracked.

From this circumstance may be dated the introduction of heavy steel castings, which the more recent development of railways, improved ordnance, stationary engines and marine machinery have consolidated into a gigantic branch of trade.

On applying at the offices in Sheffield, I found that the adjoining works at Millsands had been sold by the firm to Mr. Charles; also that the premises at Wadsley Bridge, were entirely upon the old-fashioned principle of tilting and forging. It appears that Messrs. Naylor, Vicers, and Co., are gradually consolidating their trade within their new works, as such portions of them are completed. So I had to come back again to Brightside, and find my way to the Don Works, amidst the ruck of of those immense factories. The ground plan of these works, as we have before said, extends over something like twenty acres; and, if we may judge of the whole by such portions as are completed, there will, perhaps, eventually, be nothing more commodious in the trade. I was exceedingly struck by the casting-shop. Here are 288 melting furnaces under one roof, which latter covers exactly an area of three-quarters of an acre, with only four supports between the exterior walls. In every one of these furnaces there are two pots, each of which contains 60lbs. of steel; and as the pots last for three heats, the 576 crucibles will melt about 10 tons of steel per day. I understand that the entire production of the firm amounts to about 40 tons daily. But into what articles is this immense quantity of steel manufactured? Principally into railway tyres, points and crossings. hydraulic presses, cylinders, toothed wheels, and bells. When Mr. T. E. Vicers first conducted me into that magnificent casting-shop, about thirty men were busily engaged lifting out the crucibles from those fiery furnaces beneath the floor, and pouring the brilliant streams into a bell-mould. To an ordinary workman the entire process would be simply a matter of dexterity and precision; to myself the succession of fiery balls, and dazzling streams, and bright coruscations, were intensely beautiful. The railway tyres are each made from a solid ingot of cast steel, which is first hammered, and then pierced with a large steel punch. It is afterwards extended to its required size in a tyre-mill, which forms the flanche at the same time.

I was then permitted to get a glance—and only a glance—into a spacious compartment where the fire-clay is mixed and kneaded by machinery; where an immense hydraulic press was busy at work, exhuding from a horizontal funnel a circular column of soft clay, about seven inches in diameter. I was left to infer that this column of compressed clay had merely to be cut into the required lengths, and each afterwards hollowed into the size and form of a crucible. With the aid of such machinery, two or three men are able to manufacture 800 melting-pots a day.

The Don Works are built on land leased of Earl Fitzwilliam; but the proprietors have the option, at any future time, of making the property freehold by paying a stipulated sum of money.

YORKSHIRE ENGINE COMPANY (LIMITED).

Let us pass on to a new and important branch of trade in this Metropolis of Steel. At some future time I should like to take the reader into a few of those colossal works where all kinds of cutlery, edge-tools, saws, and files are manufactured*—those endless manipulations of steel, which may be termed the veins and arteries of this great Sheffield trade. But we have not quite done with the heavy branches, or sinews of the neighbourhood. What would Sheffield, or, indeed, Great Britain, or, indeed, the world have been without steam power? Not half developed.

THE MOTIVE POWER OF STEAM APPLIED TO MACHINERY.—This shall form the text for a few introductory remarks. If the people in Great Britain had never drank tea, it is certain that they would never have required a tea-kettle. If the tea-kettle had never been known, we should not have had the steam-engine; at least this opinion has been publicly stated. Our forefathers saw with what force steam came pouring out of the tea-kettle—singing, spluttering, lifting up the lid—and they concluded that this power might be utilised. “But,” as Peter Pinkle says, “Drat those antients, for stealing our best thoughts!” More than a century before Christ, there lived in Alexandria a physician called HERO. This Greek doctor wrote a treatise, showing how certain magical tricks of the priests were effected by the expansive power of steam. Hero constructed an *Æolipile*, which was simply a hollow ball, made to revolve on its pivot by the force of steam. But this treatise of Hero, exhumed from some musty library in the sixteenth century, set mechanicians in Europe thinking and inventing. The result was that many ingenious toys were made, and propelled by jets of steam.

During the last civil wars, there was a MARQUIS OF WORCESTER, who, when not engaged in the royalist

* We might, also, see something worthy of note in stoves grate and fender manufactories—such, for instance, as the Green-lane, Roscoe-place, and Chantry Works.

struggle, devoted his time to mechanics. Although he spent many thousand pounds sterling in experiments, yet, so far as we know, he left no complete machine, or even model behind him. But he gave to the world a noteworthy book, called the "Century of Inventions," in which he speaks about constructing a vessel "to work against wind and tide, yea, both, without the aid of man or beast." He advertises in very extravagant language his "Water Commanding Engine," but gives us little or no information respecting its construction. He also mentions an engine, which, if half as curious as his description, would be a most wonderful thing. Yet the author says, "And therefore I call this a semi-omnipotent engine, and do intend that a model thereof shall be buried with me."

PAPIN, a French physician, tried to grapple with the difficulty. He said, and rightly, that a proper steam engine must have a cylinder, fitted with a movable piston. He made several engines, and could raise the piston by letting in the steam underneath, but does not appear to have had the slightest idea of condensing the steam afterwards. Papin's method was to carry the motive power by pipes into a second cylinder; but his inventions never came to any practical result.

THOS. SAVARY, a Devonshire man, employed steam for the purpose of raising water. His apparatus consisted of an upright boiler, set with fire-grates and flues, to generate steam. Communicating with this boiler was an egg-shaped vessel, attached to which latter was the sucker-pipe descending into the well, a number of branch-pipes with clacks or taps, and the ejection-pipe, by which the water was thrown out. The working of this apparatus may be explained in a few words. Steam is let into the reservoir; a stream of water is afterwards poured on the surface, and forms a vacuum within the vessel by the condensation of this steam; up rushes the water, and fills the cylinder, which is prevented from descending by the lower clack. Steam is again introduced into the bottom of the receiver, underneath the water, and the latter is thrown out by the surface shaft. "All this," you say, "is very simple, if not very effective." True, my friend, and far more important discoveries have appeared very simple after they were

applied. Pumping engines were the great desideratum of that period. Our miners had got all the eligible top seams of coal and surface veins of ore, but they could not get lower on account of the water; the mines must be pumped out. Savary's steam pump was not adapted to lift great volumes of water from a great depth, because the pressure of steam and water often blew up the whole magazine.

NEWCOMEN advanced the steam-engine a very important step. His vertical cylinder had a piston made airtight by leather or hempen packing, and to which was attached a working beam or lever, and also the rod of a pump. Steam from a "boiler" was introduced, raising the piston, which latter would have remained elevated so long as the power of steam continued equal. But the steam must be condensed or evaporated. To this end cold water was poured on the outside of the cylinder, creating a vacuum within; whereby the piston descended. Still this process of condensation was necessarily a slow one; and so to save the labour of pouring on streams of water, a cold water tank was made to surround the cylinder. But this plan affected no improvement; the result rather grew worse, because, firstly, the motive power was lessened; and, secondly, the surrounding water soon became heated; consequently incapable of condensing steam. Many of our great discoveries arise out of accidents. It happened while some cold water was being splashed about that a stream went through a little hole into the cylinder, instantly condensing the steam, so that the piston descended with an unusual rapidity. This was the very result to be desired. It had been brought to pass; but how? A careful examination discovered the crack in the piston, and set Newcomen thinking. His next object was to introduce an injection pipe into the cylinder, so that when the piston was elevated, and the tap turned, a jet of cold water quickly condensed the steam, and the piston descended. Thus Newcomen's was rightly designated "the atmospheric engine," because the working stroke is effected by the descent of the piston, which is driven down (after the steam is partially condensed) by atmospheric pressure. Originally the taps and valves of the engine had to be turned by hand, and a great

deal of care was required in working them ; otherwise the piston would either be pulled out of the cylinder, or battered to pieces at the bottom. A youth named Potter, who had charge of these taps, got tired of the monotonous employment ; and, possessing some ingenuity, he attached strings &c. to the working beam or lever so that the operations might be self-acting. This idea was seized and embodied in a permanent form by BEIGHTON. These inventions, imperfect as they seem to us now, were paving the way for what we may term the true steam engine.

JAMES WATT was a mathematical instrument maker in Glasgow, and had to repair a small model of the Newcomen engine. He saw at once that the injection of cold water into the cylinder was not a perfect improvement, because there was still an enormous waste of steam ; and Watt came to the conclusion that the cylinder should never become of a less heat than the steam itself, supplied from the boiler. But by some method the steam in the cylinder must be expelled or condensed, otherwise the piston would not descend. Watt brooded and experimented for many a long month, without any satisfactory result. At length, one Sunday, as he was taking his meditative walk on Glasgow Green, the thought suddenly struck him that if he could raise a vacuum in another vessel communicating with the cylinder, the steam would necessarily rush there, and might be condensed without neutralising the heat of the cylinder itself. But how ? Two ways suggested themselves ; one was to condense by a jet of water, and afterwards drain the vessel by a tap underneath ; the other plan was to pump out both the condensed steam and the air. Many men can see a principle and imagine a result without being able practically to accomplish what they project. Some men are dreamers and not workers. It requires often a life-time of persevering self-sacrifice before one can become a hero, even in the sphere of mechanics. Watt and his coadjutors had to lay the foundation of our mechanical progress and commercial prosperity. We had great architects, and great painters, and great poets before this time ; but no good blacksmiths. Newcomen, Watt, Boulton, Murdock, and a few others had to originate that skilled fraternity

which now take the name of "Engineers." Watt laboured under every disadvantage, since he was anticipating the necessity for constructing those famous tools and machines which now abound in our mouldshops and forges and turneries. No wonder that weary months and even years elapsed before he could get his model engine to work with any degree of accuracy. At length, after many vicissitudes, he met with friends able and willing to aid him ; engines were made to "fork mines," which those constructed on the Newcomen principle had given up in despair. Envious detractors might pooh and sneer, but practical men could see that this was very good. The work had been done, and accomplished at a very moderate expense of fuel. The principle of Watt's engine was in many points totally different to that of Newcomen's. Watt secured the top of his cylinder with an air-tight lid, in the centre of which was a neck, called a stuffing-box, through which the piston-rod worked. Under these circumstances the atmosphere could not act upon the piston to force it down ; this would have to be effected by the power of steam ; for we must not forget that the piston in its descent had to lift the weight, &c. When condensation took place in the separate vessel, steam was admitted into the cylinder above the piston (all communication with the condenser being now closed), forcing it downward. The steam was then carried by pipes both into the condenser, and underneath the piston. As time went on Watt invented the "parallel motion," causing as he says, "the piston rod to work up and down perpendicularly by only fixing it to a piece of iron upon the beam, without chairs or perpendicular guides or untoward friction, arch heads, or other pieces of clumsiness." To regulate the speed of his engines he invented the Governor, superseding the old "throttle valve," which had to be turned by hand.

For years the engines of Boulton and Watt were used solely for pumping, and very well they worked. But the requirements of engine power for emptying mines were comparatively limited ; so that it became desirable to employ steam engines in place of water wheels, and give a rotary motion to work various mills and manufactories. Watt invented the rotative motion. His

attention was directed to the matter by finding one of the copper rolling mills in Wales stopped through the draught of summer. One of the first rotary engines made by Boulton and Watt was fixed at Walker's iron-works at Masborough.

Long before WATT had succeeded in making a stationary engine to work, he used to tell his friends that they would, some day, travel in a fiery chariot impelled by steam. Between 1750 and 1758, Dr. Robison and he had often talked the matter over; but it was not until 1784 that Watt protected his steam locomotive by a patent. The boiler was a great wooden tub, firmly hooped together. The fire-box was placed in this tub, surrounded by water. From the piston-rod, a rotary motion was effected by the sun-and-planet wheel; the motion of the running wheels being communicated by toothed gear.

Fourteen years before this time, however, CUGNOT, a Frenchman, constructed a large steam locomotive, which was tried in Paris before some very distinguished spectators. The engine was made to run with great velocity, but the driver could not stop it; it ran hither and thither almost without control; and, finally, disabled itself by breaking through a wall. Thus ended ingloriously Cugnot's engine.

The first English locomotive which could be submitted to a trial, was made by WILLIAM MURDOCH; and it is proper to remark that this model engine was completed and tested at least two years before the date of Watt's patent, he (Murdoch) being at that time a workman employed by the firm of Boulton and Watt.*

* Years before this, Murdoch called at the Soho Works in search of employment. His uncouth appearance, and strong Northern dialect, did not predispose Mr. Boulton in his favour; and he received a curt refusal. The man was putting on his hat to go, when the master's eye caught sight of it. The hat was peculiar, having no appearance of either wool or fur. The great man asked what it was made of? "Of timmer, sir." "A timber hat! I never before heard of such a thing. Who made it?" "I made it mysel; having nae siller to spare to buy a new aye." "But, my dear fellow, this hat is turned oval, and not round." "O, aye, sir; I jist made the bit lathie gang anither gate to suit me." Boulton considered a moment: If this man can make a lathe turn an oval hat, he is more than an ordinary mechanic. The result was that Murdoch's ser-

For some reason, Murdoch concealed his invention ; and when the model locomotive was complete, he tried it by night, in a lane near Redruth. The little "Puffing Billy" greatly frightened a worthy clergyman, who happened to be passing at the time ; and, truly, at that period, nothing could have looked more like devilish enchantment. Watt, although upright, and ever candid, was sensitive to innovation within his own particular sphere. It is plain, from various letters which passed between himself and Boulton, that the former gave no encouragement to Murdoch's experiment. Perhaps the firm was jealous lest, what was regarded as a bauble, should divert the attention of their best workman from his legitimate employment. Even when it promised to become a success the firm at Soho never heartily countenanced the invention.

WILLIAM SYMINGTON, whose name is more intimately associated with marine engines, exhibited a model locomotive in 1786. The machinery was fixed behind the carriage ; motive power from the piston-rod being communicated to the axle by a rack and pinion.

It was formerly considered that to every carriage or waggon there must be a separate engine ; but as this method of propulsion was somewhat precarious, and necessarily costly, practical engineers gave to it little countenance. It was a novel project, however, and people began to talk about running steam carriages upon turnpike roads ; although when we hear descriptions of what our best roads then were, it seems surprising that people should so talk. The roads were bad. A few scientific men felt confident that the engine would run well if the road was right : the road, therefore, must be adapted to the engine.

Meanwhile, one WALTER HANCOCK ran a steam omnibus between Paddington and the Bank ; and although the wheels often sank deep in the ruts, and the machinery sometimes got out of order, the journeys were continued for several months.

A Mr. BRUNTON constructed an engine with two legs ;

vice was accepted, when, for years, he was regarded as the best and most trustworthy artizan at Soho ; until by his inventive talent and persevering industry. Wm. Murdoch occupied a position of eminence amongst mechanical pioneers.

that is to say, the carriage was propelled upon wheels by the alternate motion of two legs projecting to the ground from the hind part of the machine.

TREVETHICK, during the first ten years of this century, brought out several different steam locomotives. In comparison with our powerful and beautiful engines, these machines of Trevethick and Vivian will appear very clumsy and imperfect. Still they had in them the germs of a true steam locomotive. Here is one on four wheels, the two front ones being small guiding wheels ; the hind ones large and strong, having to support the boiler and machinery. There is one horizontal cylinder, with a fly-wheel on the contrary side. To the piston-rod is fixed a cross-piece, moving in horizontal guides ; from which a fork-shaped connecting-rod gave motion to a crank-axle, which had at each end toothed gear, working into the nave of the two hind wheels, thus propelling the carriage. . . . Here is another, also mounted upon four wheels. The boiler contains a large fire-box, or fire-tube, surrounded with water. The cylinder is immersed in the boiler, the high-pressure steam being admitted below and above the piston by a contrivance known as a four-way-valve, the escape steam being carried off by the chimney, thus creating a draft. The upper part of the cylinder is slightly elevated above the boiler. Attached to the piston-rod is a cross-beam, extending the whole diameter of the engine, to each end of which is attached a connecting-rod, descending to a crank on the outside of each driving-wheel. To give strength to the machinery, and steadiness to the motion, there are two vertical guides, working parallel with the piston. This engine was practicable ; indeed, it could draw a train ten tons weight upon smooth rails, five miles an hour. But the speed was very irregular, because (dispensing with a fly-wheel) the rate of motion by the crank was not equal in the entire revolution. To remedy this defect two cylinders were employed, so that a separate and alternate action should be given to each crank. In other words, one piston would be in the middle of its stroke when the other was at the end of the cylinder.

At the beginning of this century there were several colliery roads or tramways, laid with metal rails ; but

these were worked either by horses or stationary engines. So recently as 1825, the practicability of steam locomotives had to be established. The formation of railways for passenger and general traffic stimulated engineering skill. It was admitted by all that railways would never become a great institution so long as the carriages or waggons were pulled by horses. Superior power must be obtained by some means : steam must do the work. But only a few sanguine individuals had faith in steam locomotion. "Fixed engines may act,—stationary engines placed about every mile upon the line, to draw the trains up with ropes and pulleys ; but running engines—Pooh ! they can never be depended on." So people said. Two commissioners appointed by the Manchester and Liverpool Directors to decide upon the best means of propelling trains, reported in favour of stationary engines : this they did after a careful examination of locomotives upon the Stockton and Darlington Railway. Certainly the results of locomotion upon this line in 1828 were not encouraging—a very light tonnage, and a speed of from five to six miles an hour. The system of stationary engines would necessitate an outlay of £120,000, with a large annual sum for working expenses, whether the traffic was great or small. It happened, however, that besides the engineer, two or three promoters of the Manchester and Liverpool Railway had strong leanings towards locomotives. In their opinion, powerful, effective engines might be constructed to run on wheels ; and so, to stimulate invention, the Directors offered a prize of £500 for the best locomotive that should be submitted to competition.*

* The circular issued was as follows :—

STIPULATIONS and CONDITIONS on which the Directors of the Liverpool and Manchester Railway offer a premium of £500 for the most improved Locomotive Engine.

1st. The said engine must effectually *consume its own smoke*, according to the provisions of the Railway Act, 7th Geo. IV.

2nd. The engine, if it weighs six tons, must be capable of drawing after it, day by day, on a well-constructed railway, on a level plane, a train of carriages of the gross weight of twenty tons, including the tender and water tank, at the rate of ten miles per hour, with a pressure of steam in the boiler not exceeding 50lbs. on the square inch.

3rd. There must be two safety valves, one of which must be

Up to this period the common idea was that power and speed must be proportionate to size and weight ; a large cylinder, necessitating a corresponding large boiler. But if locomotives were ever to become a great success this mode must be reversed, since it was impossible that any carriage could carry an enormous steam-generator. The object now sought was to combine greater speed with lighter, or at least, less cumbrous machinery. The STEPHENSONS, father and son, knew well that power was to be obtained as much by the *pressure* as the volume of steam : so the great considerations were, first, to make the boiler strong enough, and then to give an increased heating surface to the same body of water. GEO. STEPHENSON tried the experiment of passing a great number of small pipes, filled with water through a large firebox ; but this did

completely out of the reach or control of the engine-man, and neither of which must be fastened down while the engine is working.

4th. The engine and boiler must be supported on springs, and rest on six wheels ; and the height from the ground to the top of the chimney must not exceed fifteen feet.

5th. The weight of the machine, with its complement of water in the boiler, must, at most, not exceed six tons ; and a machine of less weight will be preferred, if it draw after it a proportionate weight ; and if the weight of the engine, &c., do not exceed five tons, then the gross weight to be drawn need not exceed fifteen tons ; and in that proportion for machines of still smaller weight ;—provided that the engine, &c., shall still be on six wheels, unless the weight (a, above) be reduced to four tons and-a-half, or under, in which case the boiler, &c., may be placed upon four wheels. And the Company shall be at liberty to put the boiler, fire-tube, cylinders, &c., to the test of a pressure of water, not exceeding 150lbs. per square inch, without being answerable for any damage the machine may receive in consequence.

6th. There must be a mercurial gauge affixed to the machine, with under rod, showing the steam pressure above 45lbs. per square inch, and constructed to blow out a pressure of 60lbs. per inch.

7th. The engine to be delivered complete for trial at the Liverpool end of the station not later than the first of October next.

8th. The price of the engine which may be accepted, not to exceed £550, delivered on the railway ; and any engine not approved to be taken back by the owner.

N.B.—The Railway Company will provide the *engine tender* with a supply of water and fuel for the experiment. The distance within the rails is four feet eight inches and-a-half.

not answer, as the tubes soon became furred up. The common method of construction was to carry one flue through the boiler, into the chimney; but this did not generate steam very rapidly. An improved boiler was next made, with two flues or tubes branching off from the fire. This was better; but still fell far short of the desired result. In another experiment the flue was made to return through the boiler, the chimney being attached to the same end as the furnace. In another case, two small tubes were made to branch off from the main or central flue; and this method was found to answer best of all, evaporating the water very rapidly. It only required to increase the number of these tubes, and the principle of a multitubular boiler was confirmed. The plan of horizontal chimnies, or fire-tubes passing through water was not altogether a new idea; since in 1821 we find that Messrs. James had a patent for improving boilers by the insertion of fire-tubes. But Geo. Stephenson was the first to apply the principle with success, where it was most wanted; namely, in generating steam quickly for locomotives.

Next in importance to tubing the boiler, was George Stephenson's method for accelerating the draft. Many of the earlier engineers had turned waste steam into engine chimnies; thus increasing the velocity of air from the fire-aperture. Still the effect of this contrivance depends very materially upon the form and position of an escape-steam pipe.* George Stephenson simply narrowed the orifice by which waste steam escaped into the chimney, and the force became a perfect blast.

* This matter brings to mind a circumstance in my own experience. Once upon a time, having great ambition for trade and no preparatory training, we found occasion to put down a new 20-horse horizontal engine, and two boilers of about 40-horse power conjointly. The engine-fitters, either from ignorance or design, introduced the nozzle of the waste steam-pipe only a few inches into the chimney; so that while the engine was working steam blew across the shaft, completely deadening the draft. The consequences were serious. At first it was thought that the flues round the boilers were improperly constructed. And yet it seemed strange that, when the engine was not working, the draft from the fires was sufficient to generate steam rapidly. After a time one of the engineers suggested a remedy;—an upright length, with an elbow joint, was fixed to the escape-steam-pipe, and the draft became perfect.

The Stephensons, father and son, were not only actively engaged as civil engineers, but having established considerable works at Newcastle, they were in a position to compete with any engine manufacturer in the country. The contest was for the supremacy of railway locomotives over stationary engines; and every one knew that the Stephensons would use their utmost skill to make steam travelling machines successful. To such a firm the amount of premium was as nothing to the trade which would follow, supposing success were to crown their efforts. Robert Stephenson wrote to a friend—"I will fight for them (locomotives) to the last. They are worthy of a contest." George Stephenson wrote to his son Robert—"You must calculate that this engine will be for all the engineers in the kingdom—nay, indeed, in the world to look at." After numerous failures the Rocket was completed. The engine was placed on four wheels, the two driving wheels being proportionately large and strong. It had two cylinders, fixed diagonally along the sides of the boiler. The fire-box was double, with an aperture of three inches between each shell, which space was filled with water. From this furnace twenty-four copper tubes extended through the boiler to the escape-pipe, which latter had the orifice very narrow at its extremity, so that the steam escaped in gusts, thus causing a powerful draught by what is called the "blast."

In October, 1829, the great race of locomotives was held, where the Rocket met with two not unworthy competitors. The Novelty, made by Braithwaite and Ericson, of London, was a very light engine, the draft from the fire-box being accelerated by a fan. The Sans Pareil, made by Hackworth, of Darlington, had two cylinders connected with and working the same axle. Many thousands of spectators collected at Rainhill, about ten miles from Liverpool, to witness the contest; and as each engine was to travel 40 times, backwards and forwards, over a plane of one mile and a half, the competitors were almost constantly in sight. It happened that both the Novelty and Sans Pareil broke down during the trial, although the latter ran for some time at an average speed of 14 miles per hour. The Rocket travelled the entire distance without any casualty, drag.

ging a load of 17 tons at a *maximum* speed of nearly 30 miles an hour : she was consequently awarded the premium. This engine, until very lately, might be seen at work on the Killingworth Colliery railway, and a very clumsy machine it looked, with its boiler of thick, irregular plates, like a number of huge excrescences.

Soon after this famous contest at Rainhill, when orders for locomotive engines came pouring in, the firm of Robt. Stephenson and Co. introduced various minor improvements ; such, for instance, as placing the cylinders within a box, in a horizontal position under the boiler, since in their former inclined position much heat was lost by irradiation. The boiler, which formerly was exposed to the atmosphere, was lined with felt, surrounded with a smooth wooden skin. As the demand arose for larger engines, another pair of wheels was added to the carriage, and the heating tubes increased from 30 to upwards of 200 ; in some cases even 500 square feet of tubing was brought into communication with the surrounding water.

When steam locomotives became a success, the progress of railways was secured.

But if the *ROCKET* had not been successful at Rainhill ; if there had been no locomotive in the contest capable of drawing twenty tons weight at a speed of ten miles an hour, what then would have been the consequences in respect to railways ? Probably the Liverpool and Manchester Directors would have introduced stationary engines. Probably this step would have retarded instead of accelerated the introduction of new lines ; since it appears to us now that railway progress is a necessary consequence of successful locomotion. Still, whenever any great purpose takes firm hold of the public mind, whether it be a principle in politics or mechanics, the true embodiment is sure to follow.

Now that the motive power was established, two or three chief towns in England began to see the importance of railway communication. Robert Stephenson wrote thus to a friend (Dec. 17th, 1829) :—"The trials at Rainhill of the locomotives seem to have set people railway mad. . . . We are getting rapidly on with four locomotive engines for Liverpool, which I am confident will exceed the *Rocket* in power." But

although the two great towns of Lancashire were united by an iron road over Chat-moss, and many thousands of people rushed to see the opening of the line, when Huskinson was killed, still nineteen-twentieths of the English people hated railways. At that period railway promoters had a battle to fight; since it was not possible that the great English frame, social and commercial, could be reorganized without a struggle. A new road had first to be made through old ideas, and antique prejudices, and established private interests. This was the hardest delving. Many of us can remember what riots occurred when railways were surveyed, and what a fierce contest went on in parliamentary committees. Take, for example, the London and Birmingham Railway, which may be regarded as our first *great trunk line*. The length is 112 miles, and the Bill in Parliament (having been once renewed) cost £73,000 before it received the Royal Assent.* And then, in the infancy of railway engineering, this portentous railway had to be constructed. Instead of being let to a single firm, as is the case with more recent undertakings, there were originally thirty separate contracts, eight of which returned to the Company unfinished; having, in most cases *finished* the contractors. The memory of those familiar with the subject will recur to such works as the Primrose hill and Kilsby tunnels, the Blisworth cutting, the Wolverton embankment, &c. The Primrose-hill tunnel is 1,250 yards long, passing through moist London Clay. At first the bricks were laid with mortar, which latter was soon filtered out of the joints; and the arch pressed inwards. Ultimately bricks had to be laid in Roman cement. This undertaking cost £160,000 more than the first estimate, the entire sum expended being £230,000. At the Kilsby tunnel more than 1,200 men were employed. After a while they came upon "drifts" or "throws," which soon deluged the shaft with water. Wooden tubing was then driven

* The Great Western obtained their Act at a cost of £90,000. But the greatest parliamentary expenses of which we have any note, with perhaps one exception, were incurred by the London and Brighton Company, there being no less than four competing schemes. The committee sat for about fifty days, in two sessions of Parliament, during which time the costs exceeded £1,000 per day.

into the quick-sand to collect the water ; thirteen steam engines were employed in pumping, and for more than nine months, two thousand gallons of water per minute were drawn from this terrible range of hills. When the sand was dry enough to let the arch be driven, brick-work three feet in thickness had to be laid in cement. The tunnel, which is little more than one mile and a quarter long, cost no less than £320,000. At the Blisworth cutting (about sixty feet deep), more than a million cubic feet of earth had to be excavated. The upper portion is rock, with an under strata of soft material : this great sandstone seam had to be supported by a solid wall of masonry. Unlooked for difficulties presented themselves also at the Wolverton embankment, partly from serious "slips," but principally from the remarkable character of the material. The bank was composed partly of alum and sulphuret of iron, which took fire : it presented a most singular, and, to the contractors, an alarming appearance. Above 12,000 hands were employed in constructing the London and Birmingham Railway, and it was computed that sixteen million cubic yards of material were removed, which debris would form a belt round the globe at the equator, one foot high by three feet wide. This was Robert Stephenson's first great lesson in engineering. The reader says—"Yes ; and it would also teach railway promoters a salutary lesson : there would be few other gigantic projects floated at that period." You are quite wrong, sir. The London and Birmingham line was commenced in 1834 and finished in 1838. During the first two years of construction, thirteen new railway Acts were obtained. In the next two years (1836 and 1837) no less than 44 Railway Bills received the Royal Assent ; while in 1838 and two following years only five such schemes were launched. But it was not very long before the public began to see the advantages of railway communication, as several of the lines already constructed began to pay dividends varying from ten to fifteen per cent. Then came the first great railway mania, affecting all classes of the community.* In the

† On looking through my Diary for the period in question, I find the following crude remarks upon some very significant facts :—

October, 1845.—The railway mania has increased to a fearful

three years, 1844 to 1846 inclusive, Parliament passed 440 railway bills, the construction of which would entail an expenditure of £180,000,000.

pitch, and share jobbing is the most prominent feature of the day. No sooner is a new project made known—no matter how impracticable, so that it bears the name of railway—than applications for shares pour in by thousands; and the allotment commences. At the head of every fresh scheme is a numerous Provisional Committee: the insatiable demands of these men, and their friends, monopolize three-fourths of the shares, which latter they soon begin to dole out to the greedy public at a considerable premium; for every new scheme has been at a premium when the scrip was delivered. So extensively is railway jobbing carried on that thousands of the lowest characters and persons notoriously not worth five pounds, have amassed considerable sums. If these men, or women, can make friends with one of the railway projectors, or employ any species of fraud to get shares allotted they are sure of selling them immediately at a premium; indeed, thousands of shares are sold before any deposit has been paid upon them. Five-sixths of those who now hold shares never dream of the expense of making the lines; all they intend is to hold scrip until the most favourable opportunity occurs to sell at a profit. But if the Bills are passed somebody must find money. And if they are not passed, the last holder of the scrip must lose his ten per cent. Up to the 7th of October, there were registered for the consideration of next parliamentary sessions no less than 399 new schemes, for which a deposit of £23,994,074 has been paid, or is to be paid; while to construct the lines no less a sum than £329,290,000 would be required. Moreover, new schemes by six, eight, and even ten in a week are still regularly coming out. Prudent men when they look upon these facts, and the state of the public mind, think that an awful crisis will come soon.

February 2nd, 1846.—On a motion for a select committee to facilitate the mass of railway business, the following facts were elicited:—In 1844, forty-eight railway bills received the sanction of the legislature, requiring a capital of £14,700,000. In 1845, 187 bills were passed; capital, £50,000,000. This year the plans of railways deposited with the Board of Trade amount to 815, involving a construction of 20,687 miles of new rail, and an expenditure of £350,000,000. People may well ask where the money is to come from, since a tithe of this amount abstracted from its legitimate source would be seriously felt. The fearful effects of such a mania are now beginning to develop themselves. Thousands of honest yet deluded men are ruined. Suicides are daily occurring of people who have lost more than they could call their own, who shrink from facing their creditors, and the sight of their families reduced to ruin. But there is another class of persons whose sense of guilt I would not have upon my conscience for all their dishonest gains. Such deeds of imposture have been disclosed as have astonished the world. Truly may we be regarded as a gullible nation.

But without dwelling upon intermediate periods, let us look at the sum total of railway enterprise. There are in the United Kingdom alone 13,000 miles of railway opened. In England and Wales there is one mile of railway to every $6\frac{1}{2}$ miles of land, the average cost of which is about £39,000 per mile; the entire sum expended upon British railways amounting to about £455,000,000. Railways have thus created a trading interest which is unparalleled in history. You doubt the assertion. You point to the cotton trade in illustration of magnitude. Well, the cotton trade of England is very great. But could all the cotton mills in this country pay half the National Debt? Do the cotton lords expend as much yearly in wages or for repairs as the railway companies of England? The traffic for 1865 (since which period there have been no Government returns) was as follows:—Passengers, 251,862,715; live stock, above 14,600,000; minerals, about $77\frac{1}{2}$ millions, and general merchandise above 36 million tons; the gross receipts from all sources exceeding $35\frac{1}{4}$ millions sterling.* But for the existence of railways England would never have had such a traffic. Supposing, however, all this was conveyed by the old systems, upon canals and turnpike roads, the cost would have exceeded £100,000,000. The above magnificent returns are the result, principally, of successful steam locomotion, the maintenance of which motive power costs annually something like four-and-a-half millions sterling.

* Probably we have now reached a point when railway facilities have got to the extent of national requirements. Unless good reason can be shown to the contrary, it is scarcely likely that any new trunk line will be constructed for the next 20 years at least. This little island surface is too valuable, and the railway capital at stake is too immense, to permit much longer this ruinous competition. The interests of the community will be best sought in utilising rather than extending our gigantic railway constructions. The railway interest of Great Britain is now under a cloud. Railways, like all other trading interests are liable to vicissitudes from dishonest or reckless management. But that they will ultimately become the richest source of national revenue, no one who has carefully considered the subject can dispute. For the present hour dividends are the main consideration; and this is the reason why even good railway property, which will eventually prove a fortune to the holders, is sacrificed by the fluctuations of dishonest jobbery.

For several years past the leading railways of this country have had great difficulty in getting a supply of locomotives for their increasing trade. True, Leeds has long been noted for the production of such engines ; still, taking Yorkshire as a whole, while railway traffic continued eminent in development, the facilities for producing locomotive power have not increased in proportion. There was room for a large YORKSHIRE ENGINE COMPANY. About two years ago, when the project was first started, everybody said it would be a success ; partly because the company was under the auspices of a few enterprising, practical engineers, but principally because this was the right trade for the times. Other requirements for the permanent way and rolling stock were better supplied ; rail mills, waggon shops, wheel, axle, and tyre manufactories had been largely on the increase ; but the patience, skill, and capital necessary to complete locomotive engines had kept this branch of trade within a narrow compass.

Having received a letter of introduction from the principal promoter of the company, I met with Mr. Alfred Sacre, the General Manager, together with Mr. Stephens, who gave me every information necessary to describe their establishment. The Meadow Hall Works (Why not call them YORKSHIRE ENGINE WORKS ?) are situated about a mile from the Brightside Station, and, with convenient sidings, form a junction with the Midland and South Yorkshire Railways. The site appears to be highly advantageous, since it nearly adjoins those leviathan Iron and Steel Works, which we have before noticed ; moreover, plenty of stone can be obtained here suitable as beds for machinery ; and there is coal within a reasonable distance. The works were commenced about fourteen months ago, and are far from being in a state of completion ; still the main building is sufficiently advanced to give one some idea of the extent and facilities of the place. It may be that, five thousand years hence, the new Kingdom of Anglo-Superb will not care to know the exact dimensions of these engine works. Then why perpetuate the statistics ? Because, philosophically speaking, the origin and progress of our national trade is identified with so many yards of surface ground, and so many roods of brick-

work. Certainly, for the present moment, one likes to know how big such places are ; also, what sort and power of machinery is there animated by the intelligent will of man.

And so, gentle reader, if you will honour us with your company, and not look on with a silly inanity, we will follow Mr. Hampson through the works. No doubt where land is cheap it is better to have all workshops on the ground-floor : the machines can then work so much more steadily. Here the main building is 830 feet long, by 130 feet wide—an enormous shed lighted from the roof, and divided into foundry, turnery, and many other departments by partition walls. On looking through the spacious works, now partly supplied with machinery, our first impression is that the cost of plant, &c., will be something considerable. Upon inquiry we learn that the total estimated cost is about £250,000 ; and that very soon, the company will be in a position to turn out 150 locomotives per annum.

A superficial observer, like you and I, reader, can admire such beautiful harmony in the motion of this diversified machinery. Here are machines for cutting, (mark those immense tyre-lathes !) planing, slotting, drilling, punching, rivetting, bolt-cutting, &c. Here are portable steam-engines, which can turn a line of shafting, or be attached, for convenience, to a single lathe. All this machinery seems to do its work with perfect ease, and little noise ; so that we can only judge by the results how powerful it is. You would like to observe each process in the manufacture of a locomotive ? Dear reader, there is no pressing necessity why you should imbibe all this information in a few moments of time. Besides which, I question our ability to understand and retain the knowledge. No matter ; you will pester our guide with enquiries :—“ How is the boiler constructed ? ” Our guide is not a surly man, or he might have said—“ Go, look.” Instead of which he answers courteously :—Plate iron is obtained from the manufacturers, then smithed ; then bent, and punched, and rivetted. “ But about the fire-box ? ” Well, copper of the required dimensions is obtained from the merchants ; then punched, and bent, and rivetted. Copper stays are used to fasten the plates.

The entire weight of the fire-box is about one ton and a-half. "And about the tubes?" There are two tube-plates, which have brass tubes of about two inches diameter, and ten feet long, inserted through the holes in the tube plates, at both ends of the boiler; each tube being also ferruled at both ends to prevent its moving; and, also, as a stay, to keep the boiler and fire-box together. Each boiler contains about 180 tubes (weighing about two tons), which are worked at a pressure varying from 130 to 140lbs. to the square inch.

We notice the first batch of three powerful engines, nearly ready for delivery to the Great Northern Railway Company. The cylinders have a bore of sixteen inches, and have been subjected to an hydraulic pressure of 300lbs. to the square inch. The wheels are seven feet in diameter, and very strong. The famous Rocket, of which we have heard so much, weighed about four and a-half tons: each of these engines weighs upwards of forty tons.

Doncaster Railway Plant.

The name of Doncaster has a large circulation. London is moderately well known. She has her Houses of Parliament, from whence edicts and ambassadors travel to distant climes. She has rich tradesmen, a noted Bank, and various auxiliaries to circulate money. There reside men who not only direct the thought and feeling of millions, but engraft memorials of our age upon the future. And, besides all these, London gains no little celebrity from her more intimate connection with the Sovereign of this wide kingdom. Liverpool and Manchester are known here and there, the one for her shipping and the other for his calico. But where, in the whole civilized world, can we find a man who has never heard of the Doncaster St. Leger? Our fashionable readers in the Land of Frogs know a thing or two about Doncaster Races. "Ah," says one; "thirty years ago"—Hav'nt you been here since thirty-six? Then you would not know the place. Dear me! Why you had to post, stage by stage, all the way from London; and even then, would have to arrive a week before the time to secure anything like eligible provision. It took six weeks to make the double journey? Yes; I knew it would. Now people may leave Calais the day before this great race, and be home again the day after: such is the convenience of railways. But proceed, Monsieur, what of the town thirty years ago?—just a passing glance, nothing more. You came South, enjoying what De Quincy calls "the glory of motion," on the top of a mail coach. Inside a post chaise, was it? That's much the same. The entrance into Doncaster was very beautiful; first, the fine open course, or race common, with its circular lines of railing and elegant Grand Stand; the causeway, or promenade, ornamented with trees; the wide, straight, clean street, more than a mile in length. Yes, it was and is now, an airy, pleasant street, containing very good houses. Yes, it was a fine old church; but that

has been burnt down, and in its place stands a far more elegant but less commanding structure. Your leading impression is that Old Doncaster was just a snug little town, built in the form of a cross. It was just that. But you always wondered at those race meetings, how the few houses could accommodate such a large influx of visitors. The people were there, nevertheless; and there they remained for several days: the visitors *were* taken in, and—"done for."

And so, Monsieur, you have not been at Doncaster for thirty years. Ah, well! You are getting an old man, and old age seeks quietude. The excitement of a horse-race, and all its collateral pleasures, have lost their charms. Your mature understanding finds more congenial employment in studying our commercial aspects. H—m. Yes. Therefore, once for all, before Grim Death strikes home, you must make the grand tour through our famed Smoke Riding. Spare your old lungs? The smoke would make you cough? That man does not deserve the name of a philosopher who shrinks from breathing for a few hours an atmosphere which thousands inhale all their lives. Nay, do not begin to cough now, in anticipation. I assure you the atmosphere is not so bad at the borders of our county; that is to say, at Doncaster. Let us see. Great Northern: it starts from King's Cross at 9 a.m., and arrives at 12 57. I shall be at the Station, waiting.

. All towns have their local celebrities, some remarkable for one thing and some for another. Is it a slight matter for a man to say, in the decline of life—"I have contributed in a large degree towards the material prosperity of my native town?" Every one will admit that railways have been the making of several districts; and it is very evident that they have altered the entire constitution of Doncaster. Instead of becoming, as it is now, one of the most important railway junctions, and being able to boast of its vast Locomotive Works, Doncaster was very near being left in its pristine condition. "Pity but that it had!" exclaimed one. So did not think Edmund Denison and Robert Baxter, two old residents of the town. It happened that there was a fierce Parliamentary battle between the "Great

Northern" and the "London and York Direct:" you remember the circumstances. Some think that the Great Northern Railway would never had an existence but for the unflagging energy of those two gentlemen. Be that as it may, we all know that Doncaster would never have had its Railway Plant but for the influence of the late chairman (Edmund Denison, Esq.). And have the interests of the Company suffered thereby? Was Peterborough a better place to establish a Railway Plant? Certainly not. Everybody admits now that the Works came to the right place. They are situate in the very heart of the mineral and iron district, where all requisite productions and skilled workmen are easily obtained.

Yonder is the train, coming on at a flying pace. The whistle screeches, the platform-bell rings. The porter bawls—Donkeystir! Donkeystir! Donkeystir! The train stops. Presently, I recognise Monsieur, with the snow-white beard, and there ensues a hearty and honest greeting. Welcome to Yorkshire! But how do you bear the smoke? Ugh, ugh, ugh! You see nothing to complain of on that score yet? Right, my friend; we must get a little nearer Leeds and Bradford before your old lungs experience that infliction. But, first of all, we will pop into the Refreshment-rooms and have a sherry. "What! and be looked down upon by the 'Missis,' and 'Miss Whiff,' and 'Miss Piff'!" My dear sir, we are not at Mugby Junction. Here you will meet with proper attention, and—"Refreshments." But after such a long journey, perhaps you feel what Yorkshiremen call dry? Yea? Then have a *bitter beer*.

You remember the old coach road, years ago—we have talked that matter over—what is your opinion of the entrance into Doncaster by the iron road from London? The Great Northern line eschews everything picturesque until it approaches the borders of Yorkshire; thence, for a few miles, the scenery is not without some pretensions to beauty. Did you notice those ornamental grounds full of young trees some four miles south of this place? "Yes, I observed them particularly; and they suggested to my mind very forcibly this enquiry:—Two centuries hence, when these trees have expanded

into giant growth, will the generations of men as they look upon their beauty know or care who planted them?" Perhaps not. Near where those young plantations grace the little hills there stood some noble woods. (I ought to tell you that the district round—about 3,000 acres in extent—belonged to the Doncaster body corporate; but ask me for particulars another time.) There was Hunter Wood—probably a corruption of Hunter's Wood—and two or three more, the names of which are almost forgotten. These gladdened the eyes of past generations, became dense coverts for game, and when cut down brought the new proprietor heaps of money. Somebody planted and reared them. Who planted them, and under what circumstances were they reared? Nobody knows, and very few persons would care to know. They flourished—those brave old trees—through many centuries, memorials of anonymous benefactors. Surely philanthropy is at the origin of all new plantations; for the bits of stick which a man puts into the ground can yield neither beauty nor profit until the elements of his own body have nurtured their development. Thus, when we speak of our stately oaks being the sinews of past generations, the expression is something more than a metaphor.

But a truce to moralising. On entering Doncaster, a quarter of an hour ago, what were your impressions of the town? "I saw, in the first place, that there is a great deal of mineral and goods traffic passing this way; but was still more astonished at the facilities for expediting such traffic; the amount of sidings and shunting room here is enormous. Judging from appearances this accommodation has been recently enlarged." Yes, the Great Northern Company have just given the Corporation of Doncaster £12,000 for forty acres of very poor land; which is, perhaps, one-half more than the land was really worth. Still the Corporation did not want to sell, and the railway company did want to buy; that makes the difference. Mr. Miller, in his History of Doncaster, says he bought some of this Carr land at seven pounds per acre; but in course of time he sold it for forty pounds per acre. Since that period parcels of the same district have been purchased at a far less price than was obtained by Mr. Miller. But, Monsieur, these

petty local details can have no interest for you. They have? Then here is my hand; from henceforth there will be a mental and moral consanguinity between us. Had you ever the ague? "No, and do not want it." I believe you, my friend. But the old denizens of this low land must have shivered terribly. It was wet land. In some places horses would "sink up to the middle and get bogged." It was a paradise to the plovers, and the herons, and the snipes. Here, on Potteric Carr, the Buzzard came seeking its prey; and here the hunted stag would retire from his pursuers. And what multitudes of ducks! Speaking of wild-fowl brings to mind a curious phase of local history. In 1639, a merchant tailor of London bequeathed £100 to the poor of Doncaster for ever. Some few years later the Corporation decided to spend this money, together with a further sum of £60, "which the town owes to the said poor on another account," in constructing a Decoy, measuring something like eight acres in extent. "Had the inhabitants free permission to catch wild-fowl there, or was the pond let for the benefit of the poor?" It was let; realizing at first £15 per annum; then £12, with a bonus of twelve couples of ducks "whenever the Mayor should demand them." As time passed away, and wild-fowl became scarcer, the rent gradually declined, until at last the Inclosure Act put an end to the merchant tailor's charitable provision. Monsieur, before entering Doncaster you passed right over the site of that ancient Decoy. There is no fear now of catching the ague in travelling through this district. Subject to miasma in certain conditions of the atmosphere? Partially so. North-west the Carr is bordered by a high limestone ridge: it is just outside the town, on the Sheffield road. One may frequently see the mist like a dense cloud obscuring this Carr, when all is bright and clear above. The said mist very seldom riseth to the summit of that limestone ridge. Have another beer. "No more, thank you: let us look round the place. I noticed yonder huge building on entering the station-yard. What is it?" An Infirmary; you need not look so dubious: it is the Great Northern Infirmary for disabled and broken down rolling stock.

I do assure you there are always plenty of patients. In addition to that natural decrepitude consequent upon old age, the casualties of "rolling" exceed any other kind of stock. The battle-field is appalling, where cannon mows men down ; but nowhere is destruction so signally apparent as in the dire collision of two furious trains. "It seems a large plant, judging from the exterior." Yes, and convenient, as you will acknowledge when we have been through it. Let us ask for admittance.

But Monsieur must look well to his feet, or the rails will trip him up. I will look right and left, straight forward, and seven other ways, for fear some shunting train should maim or kill us. Kill us ! It must be a strange feeling, this emotional transition, when the spirit with one final throb quits the region of mortality ; for if natural philosophy tells us nothing of annihilation, they must be fools indeed who say or dream that the sentient principle in man can ever die. You do not long to realise the condition ? Nor I ; but do we not see that this clinging to life, which is an instinct of our nature, must be the motion of immortality ? Although not so active as you once were, and [noticing a distinct waddle] slightly affected with the gout, Monsieur still clings to life. Halt ! halt ! (just then a goods train whizzes past.) It's very dangerous ? Yes ; and yet about two thousand men pass over these rails half-a-dozen times a day. They cross and re-cross in the dark, and in the glare of the sun. Still it is very rare that any one is injured ; persons used to great risks keep their danger-eye open. "There are a great length and breadth of sidings." Right, Monsieur ; guess how many miles of rails there are connected with the Doncaster station. You give it up ? Well, one of the officials told me a few days ago, that there are not less than forty miles of rail. My friend would observe the approaches south-east and westward. He would notice to the left an immense coal yard or mineral junction, leading on to the South Yorkshire line. "Yes, and to the right I observed how the interminable sidings were almost carried into a picturesque little church and close past a pretty red-brick school. Are they also railway property ?" If I were to answer "Yes," it would

scarcely be correct ; and if I were to answer "No" it would scarcely be correct. The buildings were not erected, neither is the Church endowed, out of railway funds ; but the Messrs. Denison, father and son, subscribed part of the capital, begging the rest from individual shareholders and their private friends. Surely it was right and proper, that when the company transplanted a large new population into this hitherto quiet town some provision should be made for their education and spiritual wants. What is your opinion ? "I think the efforts are worthy of all honour."

This way, please ; we will have a look at the north end of the yard and works. Did you ever see so much ground connected with any other station in the world ? "I never did. How much land is appropriated ?" I foresaw that you might want a little statistical information to carry back with you to France ; and so I asked Mr. Sterling for certain particulars, which he very amply furnished. Let us see what he says on this point [referring to the memoranda] :—

The total area of stations, coal-yard, sidings, and plant is about sixty-five acres, exclusive of the Carr-sidings, for which above forty acres of land were recently purchased from the Corporation of Doncaster. The Plant Works themselves cover an area of about seventeen and a half acres.

So that you see, there are above a hundred acres of land connected with this single railway station of Doncaster. "It's marvellous, when we begin to consider what Doncaster once was. How many men are there employed in connection with the Plant Works ?" There is a memorandum on this point also :—

Total number of men in Locomotive Department ..	842
" " Carriage "	471
" " Running "	358

1,671

N.B.—This table does not at all represent the total number of men employed by the G. N. R. for locomotive purposes, as the company have also works for the repair of engines, &c. at Boston, Peterborough, and London.

Neither does this number include all the company's servants residing at Doncaster. There are upwards of fifty engineers' men (employed in the repairing of stations, and this district of the permanent way) ; then there are clerks, porters, signalmen, &c., &c. ; so that

we may reckon fully two thousand men on the pay-sheets of the Great Northern Railway Company in this town. But further, suppose that three-fourths of this number represent heads of families, and that on an average, each householder provides daily sustenance for three members besides himself ; we have a new railway community, created and supported by the G. N. R., numbering scarcely one-third less than the whole population of Doncaster thirty years ago. Some time, over a quiet cigar, I will give you my opinion respecting the new engraftation, what influences has been exercised upon, and reflected by, the old population ; in a word we will try to appreciate the results—social and commercial—of this great artisan element.

But at present we must observe rather than reflect. See, there are the "RUNNING SHEDS," very conveniently situated behind the station-platform. Here locomotives have their general health improved by sanitary operations ; and where any temporary ailment, or slight bruises receive prompt attention. Such treatment, taken in time, often saves the engine from a protracted and expensive regimen in the big building opposite.

The principal works have a large and imposing front, but you would not surmise that they covered nearly eighteen acres of ground. "I should not have thought so ; and what seems remarkable, there is not a single door in the front for ingress or egress." Not one ; we must go to the angle—this way, please ; and then you will be able to discover the plan and arrangement of the buildings. Notice how that little sentry-box commands the whole approaches. The sentry has his eye upon us ; but he will not presume to interrogate, because Monsieur has such a "presence," that he will easily pass current as the proprietor of a hundred shares. Here you observe a door in the corner, which is closed, and beyond it a very spacious entrance, which is open. It is now nearly half-past two by the clock. "Well ?" If we had been here half an hour ago, the wicket-door would have been open, and the great entrance-gates closed. Supposing Monsieur had been a carriage-builder, or a fitter, or a smith, he enters with the moving column through that little door, depositing his "check," or numbered *counter* in the receiving-box ;

by this means the time-keeper knows who punctually arrived, and who are absent.

You perceive the general plan of the works ; there is a double row of shops, with a main street, or rather tramway and causeway down the centre : also, cross-roads to connect the opposite shops.

We must keep to the right, because, as you see, the tramways are crowded with large driving, or "crank-wheels," coupled on to very strong shafts. Those crank-wheels are purchased from various manufacturers. I believe, also, that all or nearly all metal castings are contracted for, but with the exception of these, and steel tyres, every important part of a locomotive engine, carriage, or waggon is produced upon the premises. "Let me understand you. With the exceptions just named, everything required by the company in the manufacture or repair of locomotive engines is done on their own works. Is this so?" Respecting the *manufacture* of engines, No ; respecting the repairing of engines, Yes. The Great Northern Railway Company have in use 442 locomotive engines, of which, perhaps, not a dozen have been built at their own works. All the repairs, however, are done here ; and I understand that some of the older engines have scarcely an original part in them. As in our human body, while the identity is preserved, every material atom has been successively renewed.

Now mark how easily two or three men move that huge, disabled engine from the tramway by the steam-traveller into the ERECTING-SHOP. Yes, the contrivance is admirable. "Hallo ! (speaking to one of the men) supposing my friend and myself were to step on, along with this engine ; should we be the last lb to break the camel's back ?" "Why, no (and he looked down with a quiet smile) ; anyhow, I am quite ready to take the responsibility." So we got on to the platform-traveller, which very soon glided slowly but smoothly forward into the shop. "A large room !" Very ; it is 320 feet long, by 102 feet wide ; there being accommodation for rebuilding or repairing 42 engines. How will they move the engine from this platform ? Why see those overhead cranes, each of which will lift 45 tons, and travel the whole length of the shop.

"I comprehend."

Here is the TENDER-SHOP, measuring 226 feet long, by 52 feet wide ; and has a 35 ton overhead travelling crane. Those machines, as you see, are for slotting and drilling the frames.

Next comes the BOILER-SHOP, or rather shops, for this department has recently had a new wing built to it. The old part is 152 feet long, by 45 feet wide, and the new part is 136 feet long, by 45 feet wide. Boiler-plates are stronger than card-board ; are they not ? Yes. And as hard as nails ? Certainly. But wonderful is the power of machinery. Those strong plates are bent, punched, sheared, and planed as if they had been made of lead. But look at that iron monster, named a riveting machine. The plates are put between his head and the massive pillar. Crunch ! There is one terrible nip, and the long loose bolt acquires two heads where there only was one, and is almost squeezed into the combined plates.

Now let us proceed to the SMITHY. A very long place ? Yes ; it is 430 feet long, by 45 feet wide. It contains 54 smith's hearths or fires, and 5 steam hammers, to do the heavy forgings, and two of Ryder's machines for making bolts. Perhaps in no part of these vast works is there more genius and skill required than in the Smithy. It is a popular fallacy to suppose that any man will make a good smith providing he has muscular power. Machinery may bend, form, and manipulate things very accurately, and very expeditiously, so that the ingenuity of man is only shown in constructing the tools. But smiths' work depends mainly for success upon the ingenious hand, and the disciplined eye.

"That is a heavy, glowing mass to handle" (speaking to one of the men).

"It's 'ot," says he.

"Yes," says I ; "it is."

"It's devilish 'ot," continued he.

"No," says I ; "its hot from combustion."

The man looks first at myself, and then at the iron, as if dubious whether anything more need be said on the subject. But nothing more was said.

The SPRING-SHOP adjoins the Smithy, and is about 120 feet square. It contains, as you see, two furnaces, and 12 smiths' hearths. This room is entirely used for

locomotive carriage and waggon springs. I understood Mr. Shotton to say, a minute ago, that they here manufacture all the springs which are used in the Plant.

We will just glance at the *FORGE*, which is 157 feet long by 45 feet wide, and contains four furnaces, and three steam-hammers. Here, as you observe, the heavy forgings are done, such as axles, wheels, &c. By an economic contrivance, the boilers which supply steam to those hammers, are acted upon by the waste heat from the furnaces. I may also mention, that in the yard, over six coke-ovens, the waste heat generates steam in boilers for various stationary engines.

We might spend two or three hours with interest in the upper and lower *TURNING-SHOPS*, which occupy a large portion of the front building. They are each 335 feet long by 45 feet wide, and are what we may say *crowded* with machinery. The lower Turnery, as you see, is used for the heaviest work, such as boring and planing cylinders, turning axles, wheels, &c. The upper Turnery (this way, Monsieur) is filled with lighter machinery; such as lathes, drilling, planing and slotting machines: it is also used as a fitting, and brass finishing shop. The shafting for both places is driven by a splendid pair of engines, with a combined power of 80 horses. You must look at these as we are leaving the works. The entire machinery will be a large item in capital? Yes. I have not been able to arrive at the estimated cost in respect to Doncaster; but the total capital invested by the company for machinery is nearly £80,000.

We will peep at the *BRASS FOUNDRY*, which is 90 feet long by 25 feet wide, and contains 12 furnaces. A large sum is annually expended by the company in brass and copper.

Now for the *CARRIAGE SHOPS*, one of which is 253 feet long by 130 feet wide; the other 170 feet square. Conjointly they have facilities for building and repairing 130 carriages at a time. Mr. Griffiths tells me that for some months past these shops have been entirely devoted to repairs; but it has happened that many splendid carriages, and even Royal-saloons, were manufactured here. There is a separate shop for painting, which is 178 feet long by 130 feet wide. In all these

places you may observe travellers down the centre, for taking the vehicles in and out. "But waggons, or what you provincial folk call 'trucks;' are not they made and repaired in the same compartments?" No. Come this way.

The two WAGGON SHOPS are each 202 feet long by 130 feet wide, with room conjointly, to build or repair about 130 waggons. All the timber used here is sawn on the premises by vertical and circular saws, which are driven by a 25 Horse-power engine.

According to the Company's report there are in use 1,124 carriages, and 9,984 waggons; besides above 530 spring vans drawn by horses, to deliver goods in London and elsewhere.

This is the GREASE HOUSE. You do not care to go into the grease-house? My dear friend, grease is a very important item in all railway accounts. I remember, not long ago, the shareholders in one of our largest railways got up quite a sensation on this subject of grease. The simple figures seemed to their unsophisticated minds something appalling. Probably one or two individuals, of an imaginative turn, would picture to themselves the mountain of fat which that debit represented. But suppose for a moment that the G.N.R. directors, from motives of economy, were to interdict the use of grease for fourteen days, what would be the effect? Is there anything more horrible than the screech of a thirsty cart? Suppose that the 50,000 wheels of this company's rolling stock were each respectively to reiterate such discordant noise, what would become of the drum of men's ears? Grease is a necessity.

The company have lately built GAS-WORKS, at a cost of about £8,000, to supply the various shops, and the railway station with gas. There are 35 retorts, set in 7 benches, 25 of which, I understand, will be in constant use.

THE OAKS COLLIERY TWO MONTHS AFTER AN EXPLOSION.

There is a melancholy quietness pervading all the scene. Not now, at fitful intervals, comes the boom of an explosive shock, bringing paroxysms of dread to the initiated ear. Not now rushes to the spot an eager multitude, impelled by fear, or curiosity, or that fraternal sympathy, which is stronger than philanthropy. There are no heroic bands gathering now, willing to jeopardise their lives to save their fellows; hope has long ceased to stimulate duty, for by this time, probably, not even a charred disfigured corpse is left for rescue.

The retrospect is very painful. On the 12th of last December, *three hundred and forty* men and boys were down in this pit, alive and working. Of this number fully one-third would be husbands and fathers. It was nearly half-past 1 o'clock, p.m., when a terrible shock was felt, as if some heavy cannon had been discharged in the neighbouring hollow. But the colliery population knew well what such a sound betokened, and they rushed in consternation to the old pit-hill. Here signs of an explosion were visible enough. The cage had been blown out from one of the shafts. There was no withstanding that evidence. Crowds of people hurried to the Oaks, moved by one desire to save, if possible, some inmates of that fiery cavern. The brave engineers and miners, several of whom had relatives down in the pit, were not deterred by the presence of gas or choke-damp: they entered the cage in No. 2 shaft, and went down into the region of death. The sickening spectacle presented for the next few hours on that pit-hill will live for ever in the memory of the observers—charred, blackened, but not utterly lifeless forms are delivered to weeping relatives; and when such breathing remnants of humanity could no longer be found, disfigured corpses were brought up. Twenty human

beings were recovered alive, but of these fourteen were so seriously injured that they have since died. These few living workers had made their way towards the shaft, where there was some measure of ventilation : those found in the distant workings were all dead, killed, probably, not by the explosion, but by the poisonous after-damp.

The cage, freighted with relays of eager volunteers, ascended and descended all night long, restoring lifeless forms to relatives, who, in many cases, could scarcely recognize the features. During twelve hours succeeding the explosion, about fifty bodies, in various conditions of ghastliness, were brought up from the pit. But there were scores of wives, mothers, and children who had not even these relics to comfort them ; they went home in despair, if home it may be called, where the bread-winner could enter no more.

On Thursday morning, about nine o'clock, another and louder report was heard. The earth shook and trembled, for the Fiend of Fire-damp was wroth. The shafts belched up smoke, coal-dust, soot, and broken timber, scattering the fragments far and wide. The bystanders were awe-stricken, and strong men wept with anguish as they recollected that *twenty-seven* explorers were then in the pit. The empty cage was lowered in silence and fear. It was afterwards drawn up, but it remained empty still ; and then the bystanders felt that all hope for the brave volunteers was gone. Two men lay at the pit-mouth, and amidst a profound stilness "chucked" their voices down the heated shaft. There was no response.

During the day (Thursday, Dec. 13th) a third explosion took place, and in the evening a column of white smoke was emitted from No. 2 shaft, accompanied by volumes of sparks. At this time all surface lights had been extinguished, while, excepting the presence of police, with a few coal-mine officials, the pit hill was quite deserted. Between four and five o'clock on Friday morning, the watchers were startled by hearing the pit bell ring. It was not a mere hallucination, the sound was repeated, proving, contrary to all expectation, that there was life in the mine. A bottle of brandy was let down by a string ; and when the latter was

drawn up, the bottle was absent. Presently a rope and small cage, or tub, were extemporised (the winding-gear of both shafts being totally disabled), when two gentlemen descended the shaft. At the bottom was Sam Brown, one of the twenty-seven volunteers, alive but nearly exhausted. The two explorers went some distance through the pit, searched and shouted; they discovered that the mine, in one place was on fire, but could find no other living human being. It excited great surprise that this Samuel Brown should remain alive twenty hours after that second explosion, in which all his associates had perished. How had they associated? Brown's statement is that, at the pit bottom, the party of volunteers had separated; that when he and three of his companions went down the incline they encountered two bodies, which they carried to the engine plane that they might be drawn to the surface. Soon after they met a party of explorers who were hastening back to the shaft, because the condition of the pit in that direction was very bad. After this he (Brown) and his coadjutors took refuge in the lamp-hole, situate between the two shafts, and where there would be some degree of ventilation. While there he heard the explosion, and after that became unconscious. He was still in the lamp-hole when he recovered his senses, and on going out discovered that some corves of coal were burning. He at length found the bell-rope, heard the response, drank the brandy, and was ultimately rescued. The inference is that Samuel Brown had never advanced far from the pit bottom. But what became of his companions? On this matter he can furnish little or no information.

On Saturday, December 15th, three or four more explosions took place. The reports were loud, and there was still a great emission of coal-dust, soot, and broken timber from the two shafts. The task of exploring the mine had long since been abandoned. To stifle the fire the cupola was first filled up. It was probably the best policy to choke the up-cast; but during the next fortnight not less than a dozen distinct explosions were heard at the surface, some of them very powerful. Meetings of colliery proprietors and mining engineers continued to be held, and it was decided to stop the

down-cast air in both No. 1 and No. 2 shafts. This was done. Then followed the coroner's inquest, occupying many days.

But before noticing that investigation, let us glance at the past history of the pit. It is above thirty years since the first "corve" was brought to bank at the Oaks Colliery. For eight or ten years, while the mine was limited, no serious accident occurred. In 1845, however, there were two explosions, during one of which the pit was fired. Fortunately, on each occasion but few colliers were in the workings, so that only three or four lives were sacrificed. Two years afterwards (1847) a far more terrible explosion occurred, and it was generally understood that the gas had accumulated in an old abandoned working. There were about a hundred men and boys in the pit, seventy-three of whom were killed, and twenty-six rescued alive. Of course then, as now, there was a coroner's inquest with the usual verdict—"Accidental death." But the jury urged their opinion "that the recurrence of accidents involving so large a loss of human life demands *the immediate attention* of Her Majesty's Government, and would justify Parliament in passing such a code of regulations as would give greater security to persons employed in mining operations." The catastrophe excited a great deal of public excitement and no small amount of sympathy. Nearly twenty years have elapsed since then; and meanwhile the insidious forces have nurtured themselves for a wider and more signal destruction. True, about that time (1848) some material changes were made in the organisation of the pit. The down-cast shaft was converted into an "up-cast" or cupola, while the present No. 1 and No. 2 shafts, which had been sunk only to the upper seam and afterwards abandoned, were carried down to the lower levels, and employed as down-cast air and drawing shafts. The depth of these is now about 280 yards, but the seam, which is above eight feet in thickness, dips so considerably that some of the workings would be at least 400 yards below the surface. It is computed that about 300 acres of coal had been got at the Oaks Colliery, the average yield being about 4,000 tons per week; that the pit contains about 60 miles of wall, and when the

explosion occurred there were men in those distant levels, two miles or more from the bottom of the shaft. How was it possible that these men could be rescued alive? There has been grievous error apparent in the management of this colliery. A novice would be convinced of this fact after five minutes' reflection. Nineteen years have elapsed since the catastrophe happened, during which time the workings have become vastly extended without any adequate provision being made in the shape of extra shafts. Surely upon this vital matter the managers must have displayed heedlessness or wilful neglect. Years ago, one if not two additional shafts might have been sunk in the distant workings; thus affording not only increased ventilation, but a convenient means of exit in case of accident. I grant that such additions would have been attended with great expense; but what of that? Men's lives ought to take precedence of mere per centages and profits. I know that this is a delicate, and, in some respects, a difficult question. There are few braver or kinder hearted men than Mr. Dymond, the suffering proprietor of the Oaks. But the truth must be spoken, even when it may tend to aggravate a good man's sorrow. Still before we go so far as to assume that, constituted as this pit was, such a dire result was inevitable, it will be only just to trace carefully the effects from their cause.

The reader is already acquainted with the general plan of the colliery. There are three shafts. The two "downcasts" are only a few yards apart, situate close to the South Yorkshire Railway; the upcast, or cupola being at a distance of about 500 yards from the former. The workings, as we have seen, are the most extensive in Yorkshire. There was a furnace, constantly burning under this upcast shaft to accelerate the draft, drawing up the return air, charged with gas. There was a gasometer to store the gas, which by means of pipes was drained from the overcharged workings; and this supply was utilised by lighting the principal roadway. A dispute has arisen whether it is better to burn gas in the mine, or carry it off in a separate air-course. I believe in some of the northern collieries they have a method of piping the gas into a special shaft, or cupola, and burning it at the surface.

It is generally acknowledged that the Barnsley seam is peculiarly liable to emit sudden and extraordinary effusions of gas. The "goaves" are almost always more or less surcharged with gas, which, at times, is given off in such volumes as to necessitate the most careful working. On several occasions during the last twenty years there had been extensive escapes of gas at the Oaks, more than once putting out the "Geordie" lamps; but, luckily, without coming in contact with a naked light. Once the floor cracked for a considerable distance, when the fire-damp rushed out with a loud hissing noise, like that of escaped steam from a boiler. At another time the mine was fouled for above 1,500 yards, extinguishing all the lamps within that radius. We are now sufficiently aware that, in the vast dip levels of this pit there were frequent and dangerous accumulations of fire-damp, which needed only the application of a spark to produce the most disastrous results. We know, also, that safety lamps do sometimes get damaged from a stroke of the pick, or other causes: then where there is gas there must be destruction. Only one safe and practical remedy occurs to us, and that is by a thorough ventilation to dilute and dissipate those noxious gases.

The fearful explosions in December last did not occur without premonitory symptoms. Some time previously a deputation waited upon the manager, stating that the pit was in a highly dangerous condition, that several of the hands refused to work, and that if some better means were not applied to remove the gas, a serious calamity might be expected. The presence of fire-damp was so extensive for days preceding the explosion, that men escaped giddy and almost insensible from the breaks. Under these circumstances, had any lamp been accidentally damaged, an explosion was inevitable. The miners dare not even take the safety lamp near some of the "goaves," since it would immediately have been put out. The underviewers had chalked the word FIRE in some of the distant workings, that hands might exercise special care. Still the managers do not appear to have seen, or, at least, refused to acknowledge that the pit was more than ordinarily dangerous. There were 160,000 cubic feet of air per minute passing

through the down cast shafts into the mine. Something they resolved upon, nevertheless, and that was to make an extra drift to assist the ventilation, and afford a better means of exit from the pit. So they urged on the operation with all speed by blasting. It has since been a subject of much controversy whether the firing of such a shot did not explode the mine. True, this stone drift, where the blasting took place, was only about 80 yards from the pit bottom, while there was a naked light in "Thompson's box-hole," and naked gas lights along the engine-plane for a distance of 800 yards. It is contended, therefore, that "loads of gas" could not accumulate and explode in the full stream of this down cast air. But it is a singular coincidence that the explosion should have immediately succeeded one such discharge of powder. A witness at the inquest states that he was ordered into the boxhole (a place where lamps are kept), because they were going to "fire a shot." First, there was a dull, heavy sound, as if the blast had penetrated into some distant working, when, in a few seconds, the pit exploded, and before he became unconscious, the whole mine was a body of flame. The lamp-keeper told how the firing of those shots generally put the lights out for a considerable distance in the engine-plane; but he had never before seen a blaze as the result of such blasting. Immediately upon firing that last, powerful shot, the pit was all on fire. It is reported that one sufferer on his death-bed volunteered a statement that he warned the men not to fire that shot, because of the dangerous presence of gas. The fire, from whatever point the explosion took place, appears to have been very extensive, and is conclusive evidence that the presence of gas had almost flooded the mine.

So far as we know, no catastrophe in Yorkshire, at any time, has cut off so many human beings at a stroke. After the first thrill of consternation had passed away, people said to one another—Now the public mind will be thoroughly aroused, and something must be done to prevent such disasters. The Coroner and jury sat thirteen days, and after listening to some evidence, and a great deal of scientific disquisition, returned the following verdict:—"That Richard Hunt and others were

killed by an explosion of fire-damp at the Oaks Colliery on the 12th of December, 1866, but there is no evidence to prove where or how it ignited. The jury think it unnecessary to make any special recommendations as to the working of mines, seeing that the Government is collecting information, no doubt with a view to the better protection of life, but they think a more strict inspection is desirable."

And what next? The "accident" has caused widespread suffering, the result of which will not cease for many years to come. And the sorrow!—the widespread grief which has entered into so many homes, severing the vital organization. I sometimes think that there is a strange fallacy abroad respecting the social and domestic life of grimy colliers, and, indeed, with respect to the whole class of what are termed *menial* workers. Respectable people are apt to think that beautiful sorrow is confined to the educated and the refined, forgetting that there is often little sincerity in the conventional drapery of woe. People who "pass on the other side," and get but a passing glance at the outward aspect of low-class life, undertake to become social tutors. If such men could penetrate beyond the rough, and often rude exterior, they would not unfrequently find a deep substratum of moral rectitude, consistent purpose, and honest, undessembled feeling. But enough on this head; with right thinking people, a regard for the condition of those bereaved ones will survive the varying phases of public excitement.

Public excitement in relation to this great calamity is gradually subsiding. And now—What? The subject will certainly add another item to the details of local chronology. There has been two months' twaddle about cause and effect, and now—What? I speak to men in authority, and practical men. Is the whole matter to be shelved, or evaporate in a few vague resolutions, until another similar casualty excites a parallel consternation? There is one fundamental question which, to my mind, has never been satisfactorily answered:—Can explosions in these deep, extensive mines be entirely prevented? The preponderance of testimony from mining engineers (and such men ought to know) is, that they cannot. Increased care, and superior ventilation,

may lessen the severity or frequency of such accidents ; but so long as the world lasts, while there are mines to be worked, and coal to be got, there will inevitably be jeopardy of life. It is so with our mariners. The ship may be good, and the hands may be experienced ; there may be systematic and unceasing watchfulness ; but some unprecedented storm, or treacherous quicksand, may render futile all human endeavours, and the coast will now and then be strewn with wrecks.

The footpath leading from Ardsley to the Oaks Colliery was barricaded. Upon the boards were warning placards—"Very dangerous," "No person admitted," &c. Still I had the temerity to climb over a low wall which skirts the railway, and advance towards the pit hill. Some misgiving arose in the mind, nevertheless. Suppose a proprietor happens to be present, and asks peremptorily why a stranger comes there, in direct contravention to the notices, what shall I answer. The best plan under all circumstances is to speak the truth. For instance. QUESTION : Who are you ? ANSWER : A member of the Fourth Estate. (That has a grand sound, particularly to those who know not its signification.)—QUESTION : I beg your pardon, sir, but what may be the object of your visit. ANSWER : To obtain information concerning the present aspect of this colliery, and submit such report to the nation. Surely this will be deemed satisfactory. It happened, however, that nobody was visible except a watchman, who not only shewed me round the place, but furnished various items of information. When the first explosion took place this man was on the pit hill, and (to use his own words), "felt such a sucking of the air," that to prevent being drawn into the shaft he had to hold fast by the headgear.

"You knew what that meant?"

"I knew that the pit had fired, and said to myself—'God help them men and lads, far off in the workings!'"

"Then you thought they must all have perished?"

"No, I did not think it was so bad as that ; the explosion did not seem so terrible at the shaft. But the after-damp !—this is what kills men."

"Suppose, however, there had been no explosions after the first, would it have been possible to recover any from those distant workings alive?"

"Can't say. I believe every effort was made by the explorers to rescue men, dead or alive."

"Some people think now that if they had used similar exertions to put out the fires, no further explosions would have occurred."

"Maybe so. I only know that the second explosion was a deal louder and more powerful than the first: it made the windows in the houses at Hoyle Mill fair *dither*."

I stood between the two shafts down which so many had gone to the region of death. One shaft was filled up—chokeful of earth and rubbish; the other had a wooden scaffold suspended by wire ropes, and let down about twenty yards. Upon this cage was first piled straw, &c., and then puddled clay; so that, except a small aperture from a temporary iron pipe (which contains a valve to close or open the orifice at will), this shaft, also, was sealed up. I suppose that by the signs of up-cast gas, or down-cast air, through this narrow pipe, the viewers may form some opinion respecting the internal condition of the mine. While I am writing, a strong current of air is passing down this narrow funnel (for many days together it had continued to emit gas), which leads experienced men to infer that there must still be fire in the pit. One would think, in such a case, that smoke would inevitably find its way to the surface. It appears more probable, now ventilation is almost totally cut off, that the mine will be a huge reservoir of foul air and fire-damp: some care will have to be exercised in opening the shafts. Yes.

It was not necessary to linger on that gloomy pit hill—a few moments sufficed for my eye to take in all objects on the surface—so I enquired the way to Hoyle Mill, where many bereaved families are congregated. As the result of this single calamity, we learn that there are here 50 widows and 113 fatherless children. Out of about 60 cottages which form this hamlet, there is left a male population numbering only thirteen, who are capable of earning a living. Since these widows (together with many living at Barnsley, and other places) are left totally destitute, it was evident from the first that help must be brought to them. Public benevolence has not been so extensively developed at this crisis, as it was

when the Hartley Colliery explosion occurred, partly, no doubt, because it was known that considerable portions of that fund were never appropriated. Still, during the last three months, very encouraging lists of subscribers have been issued, and I felt a little interest in learning how the common fund was being administered.

There stands a sort of school-house, or public room, near the Oaks colliery, to which place, on this particular day, a considerable number of women were going and returning. It struck me at once that these were the widows of such as had perished in this pit; and so it turned out: their errand was to the school-room for their weekly subscriptions. "How did they look—those widows?" For shame, reader! Why do you wish to make a raree-show of private sorrow? You are not curious? You only stipulate, as a public duty, that there shall be a decent observance of grief? Well, well, the world is critical. I remember, when a boy, feeling surprise and pain when any one who had a mourning band on his hat happened to be merry or profane. To my unsophisticated mind the affinity of family souls was unspeakably sacred; so that the very idea of death and separation was terrible enough to stifle the whole future of joy. This was very childish, you know, and not a healthful instinct, since, acted upon, it would be like carrying a taint of the charnel house into a conservatory of luxuriant flowers. True, bereavement, like a bad cold, affects people differently. There may be those who see in the severance of family ties only the addition or subtraction of meat and drink. Others think and feel differently. But to the point—these poor women, on the whole, were very decently clad, and, without simulating a mournful demeanour, appeared to nurture a consciousness of their loss. Some of them were more than tidy, exhibiting in mourning habiliments a visible fondness for dress. "Humph! one would suppose they could not find money enough to indulge such a propensity." That is a very ill-natured remark, reader, and shows that your heart cannot be in the right place. I did not say that their dress was extravagant or unbecoming. Take this dictum with you, and be assured of its truth,

that it is only a worthless woman who pays no regard to her personal appearance. Furthermore, I really believe these widows feel that their dress and demeanour exhibit a tribute of respect to those names which fate has made of public significance. Those poor women may not be able to define such a motive in so many words ; but the reality is there notwithstanding. Nor, in accepting public bounty will they feel that demoralizing sense of dependence which is commonly the result of eleemosynary aid. Truly, they do right to regard their position more in the light of pensioners than of paupers on the public purse. What do they receive ? That is an important, practical question. On approaching Hoyle Mill, I met a gentleman who appeared very likely to furnish suitable information ; so we fell into discourse. Said I—

“There are several hundred women made widows by the explosion in yonder pit ; can you inform me how much per week they have to live upon ?”

“Yes,” said he, “I can. The widows receive, at present, ten shillings per week—five shillings from the Relief Fund and five shillings from the Miners’ Union.”

“Each the same amount whether she has a family or not ?”

“I was going to tell you—there is an additional half-a-crown a week allowed for each child under thirteen years of age.”

“And will the widows continue to receive ten shillings weekly for life ?”

“That may depend upon circumstances—in respect to the Relief Fund, whether the subscriptions will hold out ; and in respect to the Miners’ Union, whether it may not eventually have to make some special agreement with the participants. For instance, a bonus of £20 is now offered to every widow who shall change her condition, *i.e.*, take a second husband ; since she is thenceforth disqualified from receiving relief.”

“But, supposing she repudiates all intentions of dissolving her connection with the miners general by entering into a more personal union,—what then ?”

“In that case it sometimes happens that the association will still make a special agreement with the recipient, whereby, in consideration of a certain sum paid

down, all further claim upon the funds is abrogated. The Relief-committee, in like manner, may come to some final agreement, and divide the remaining assets amongst the recipients. At present, I believe, the Miner's Union is strong, and affords ground of hope that, under such calamitous circumstances, every collier's widow will receive a stipulated sum weekly for life."

"Then you consider such unions or associations to be very beneficial?"

"As organizations of labour I think they are often decidedly mischievous, causing much dissension, and no little suffering. But as mutual benefit or provident societies, they may do incalculable good. And this matter brings to recollection the fact that many of those unfortunate colliers were members of various benefit societies, so that their widows are in receipt of a specified sum, called funeral money. The aggregate of these payments is telling seriously upon the funds of certain local clubs."

Here we separated; he was going towards Ardsley, and I was going on to Barnsley (intending first to glance at the desolate hamlet of Hoyle Mill); so he bade me "good morning," I bade him "good morning," and we parted.

Then I took a bird's-eye view of the landscape, which is here very irregular. The hills rise abruptly, with deep valleys between. Was there ever a time when our globe was even, and smooth as an orange? Yes, it might be so once; but that would be in the infancy of this child called earth, when it was thrown off from some parent system in a condition of— What? I will thank the reader to inform me. Unfortunately no one has yet bored through the centre to the other hemisphere, or he might set at rest various surmises, namely, how deep the crust extends, and what there is beyond it. True, we can get to a primitive bed, which bears little or no evidence of disintegration, which presents the molten appearance of furnace dross, only a hundred times harder. We know that the condition of these rocks is an evidence of central fire; but who can tell us whether the centre of our globe is really a seething, bubbling mass, or merely the cavern of some imponderable force?

Tracing effects to their cause, we come to a certain conclusion that the globe could never present so ragged an appearance but from internal igneous eruptions. The combined forces of air and water on the surface would never have produced these vast irregularities. We see the effects of earth's central fire in many forms ; at times heaving up great streams of lava, or tearing wide chasms in the outward crust ; or, in a milder yet scarcely less destructive form, emitting from its dread stomach the poisonous fire-damp.

"Look here, boy, (a little urchin was passing at the time,) what do you call this place ?"

"Why, its Hoyle Mill."

I observed two rows of stone cottages ; but all were silent. There were no busy steps passing in and out ; no gossiping at the doors. A stranger passing this way might conjecture, without any previous knowledge, that some calamity had overtaken the inmates.

Nicholas Yak, and his Daughter.

CHAP. I.—THE OLD DONCASTER MANORS.

Nicholas Yak had a large timber house in the manor of Rossington. He lived there; and it was well known at Doncaster, and throughout all the district round that he was a man of substance. But nearly two centuries and a half have passed since Nicholas gave up the ghost, and alas! alas! many changes have occurred. As a rule ghosts must have good memories, with perceptions marvellously acute; still if the spirit of Nick Yak could obtain a furlough, and follow the line of our present highway, careening through the air, it is very doubtful that he would recognise the place. When he lived in the flesh there was a great deal of land in the neighbourhood which was scarcely worth saying—Thou art mine. N. Y. knew—no individual better—how easy it was for the recognised *villeins* to retain a large holding for a mere nominal consideration; in fact, for hundreds of years, the *tenent right* in this land seemed to be the only right undisputed. Be mannerly, reader, I know the meaning of that impatient gesture. You do not want to be bored with dry chronicles. Neither shall you, by me. Still it is really necessary to take a glance at the claimants in succession to those wide Doncaster Manors. The Conqueror gave them to Nigel de Fozzard (no doubt he was one of his own soldiers), and when this race had dwindled down to a single woman, King Richard gave her in marriage (for four hundred years, or more, the kings of England always thus disposed of unprotected heiresses,) to one Robert de Turnham. There is no evidence to shew that Robert bought her of his leige lord for a stipulated sum of money, although such transactions were not uncommon in those days.

About thirty years afterwards, we find the De Mauleys in possession of the estates; but how they obtained them does not very clearly appear. They got

them, nevertheless ; and kept them for more than two centuries. True, Peter de Mauley IV. sold the manor of Doncaster, together with the advowson of Rossington for a hundred pounds to John de Warren, Earl of Surrey ; but only for a single life ; afterwards they reverted to the Mauleys. During the close of the 16th and first quarter of the 17th centuries, much litigation went on between the Crown, the Corporation of Doncaster, and a family named Salvayne, of Newbiggin, as to the right of possession in these manors. Eventually the Corporation compromised Salvayne's claim for "a good round sum of money," and King Charles II. prevented all further disputes by granting a charter to the Borough of Doncaster. You know the sequel—for the fact is notorious in the history of municipalities—how this ancient, unreformed Corporation "got over head and ears in debt," when the Rossington estate was sold to a rich merchant of Leeds.

But to our narrative ; it was while this dispute with the Salvaynes continued, that Nicholas Yak lived at Rossington ; and—we cannot tell to a certainty, but it is very likely—he paid no rent. Nicholas was not a man to pay rent, or anything else, if he could get off it. Perhaps the reader concludes that such land was scarcely worth paying rent for. Well, it was not very productive, at the best ; indeed, there were large large tracts which would scarcely have sustained a colony of geese. The valley, extending from Potteric Carr southwards, was simply a morass, of little value to anybody, while the surrounding hills were formed of sand and gravel, containing, also, large boulders. Nicholas Yak never puzzled his head about the physical history of our globe, never enquired how it came to pass that there was here a deep, marshy basin, skirted by hills of gravel. No. The rounded stones, large and small, were to him simply boulders and pebbles—nothing else. We know, or think we know, how they were rounded, and how they came here. But all this has nothing to do with our narrative. Nicholas Yak lived on the high, hungry land, about ten acres of which he cultivated, and had some thousands of sheep cropping the scanty herbage for several miles round. Of course, a few of the old tups had bells fastened round their necks ; first, because

the flocks would never wander for long together beyond the sound of those bells ; and, secondly, that the shepherds might know where to find them. It was an old expedient, but very effective. Nevertheless, Nicholas lost a great number of sheep ; how, we may be able to guess, perhaps, when we have taken a glance at his neighbours.

CHAP. II.—THE GIPSIES' CAMP.

There were no hedges throughout all this locality, and very few stone walls, for enclosure acts had not then come into operation ; while trees were of so little value, as scarcely to be worth the trouble of felling. Old England possessed no "green lanes," such as are now deemed picturesque ; but there were little dells and hollows beautiful enough for the fairies to live in ; and dark woods, where it would be dangerous for young people to go blackberrying ; and jungles, where the hunter might almost lose himself in pursuit of game.

The human population for miles round was very scanty ; but the scattered bipeds had few cares and anxieties, so that there was a repose in well-being. "Ah," say you, "life was real then—no conventional sham and hypocrisy—so that all God's creatures enjoyed a long lease of happiness." Yes, it was the meridian glory of conservatism. The very birds colonised in the old place from generation to generation ; while amongst all aristocracies there were, perhaps, none so numerous and influential as the crows. Poor things ! it makes one feel melancholy to contrast that pristine condition with their present migratory fate, driven hither and thither, like larger aborigines, before the march of civilization. True, to this day crows set up business for themselves—begin life, as we term it—some in busy thoroughfares, and some in the quiet by-places of the world, as it suits their particular tastes, or hereditary bias. On the whole, it may be, they enjoy as much happiness as other intelligent beings, while, certainly, if life be a good thing, they ensure a long-continuance of the blessing. Moreover, as a rule, they do not injure the constitution by evil habits. No doubt there are good crows, and Bohemians ; honest crows,

rogues, and those who are honestish. Some are quarrelsome, some are mercenary, some are thoroughly base. I do not think there was anything like the amount of moral obliquity about rooks of the olden time. Perhaps you think that circumstances make the—crow; and that, centuries ago, there were less incentives to rascality. There may be some truth in that. Formerly, in building a nest, little or no temptation presented itself to steal, because plenty of material might be had for the gathering; while no “scarecrows” were stuck up in the open fields to shock their moral sense, and make them feel like guilty things while they were picking their food.

“Drat the crows!” say you.

It is somewhat curious that this very exclamation should have been made two hundred and fifty years ago; but under widely different circumstances. In one of those aforesaid dells, two women were sitting near a fire of sticks—sitting on the mossy ground, with their knees almost up to the chin.

“S—h!—lass—tr—not come. Love—sick to—da—sc—d.”

It was a fine summer’s eve, and the crows were giving forth a friendly benediction before they retired to rest, so that the two crones could scarcely hear each other speak.

“I wi—lass to—come. Sh—li— a—”

“Eh?”

“Drat the crows!”

The two women, who were Gipsies [“Or pot hawks?” “No, they were Gipsies.” “Humph! red cloaks; also huge beaver bonnets?” “Psha! raiment does not make the woman. Not only had they raven hair, the large black eyes, and darkish skin without a tinge of bloom, but the whole physiognomy was distinctive. You may point out a Jew anywhere; you may anywhere recognise a gipsy”] relapsed into silence for a considerable time.

Our sketch is not quite complete. At present it stands thus:—

GLOAMING. A SHELTERED NOOK, WITH TWO GIPSY WOMEN SITTING ON THEIR HAUNCHES NEAR THE FIRE.

What else ? Why, you know quite well, reader, that neither Gipsy, nor any other women, would be there by themselves. There is sure to be a man somewhere in the neighbourhood, you know. See, about twenty yards to the left, between the boles of two trees, which embrace each other at the top, is a grassy mound, about three yards square. It is artificially composed of sods, strengthened with stakes. There sleeping is done. Now-a-days, when the Gipsy life is more precarious than it was, the tent and sleeping apartment have to be improvised out of a cart-cover. It was different then. But where is the aperture in this mound for ingress and egress ? Well, it is somewhat difficult to find, owing to the luxuriant vegetation which clusters near the spot. But, look ! a little head of black tangled hair peers out, followed by a lithe, agile body ; and this question is put :—

“Dad wants to know if th’ meits anuf?”

“It’s a mile off,” replied the elder crone ; *i.e.*, will not be ready until such time as he could run a mile.

This colloquy reminds us of another object in the scenery, viz., an iron pot, suspended by three poles over the fire, in which there was something good simmering.

The crows were becoming less and less noisy overhead, as each bird settled in companionship upon his and her favourite twig ; the shadows of night were gradually deepening ; one of the Gipsy crones threw another log upon the crackling fire. Then, with a fierce glance lighting up the eyes, she said—

“We shall get it ; the Fates have so declared.”

The other (a younger woman) shook her head, as if in doubt, and gazed intently on the fire.

But her companion commenced to chant some doggrel rhymes :—

“The greedy man hoadeth his gold,
(For thus the Fates have foretold),
But others succeed to the pelf,
And each one, while gratifying self,
Distributes it far and wide :

’Tis thus that our wants are supplied”—

“Hark ! [z-zah !] it is the snorting of a horse. Listen !—you may hear the measured tramp of a mounted horse. Some traveller comes this way.”

CHAP. III.—A GUEST TO SUPPER.

It was so, a horse and its rider presented themselves before the Gipsy camp. But when the traveller saw two women only, he shrugged his shoulders, saying—"I thought there might be hunters who had kindled a fire to cook their food." Then observing the steaming pot, he added to himself—the hags have got a stew of some sort; and faith! if it be composed of prickly-hochins [hedge-hogs], with boiled beetles for sauce, I should scarcely hesitate to partake. But it would be proper first to make some inquiries.

"Ho, there, daughters of Satan; what have you got for supper?"

"Ask no questions for conscience sake," replied the elder of the two Gipsies.

"But I am almost famished."

"Then wait a bit: you are welcome to a share of what we can offer. It may not prove so bad as it seems; anyhow you are welcome to a taste, and if it be not to your liking spit it out."

The man thought within himself—Well, I might do that.

Scarcely had he loosened his horse's bridle, that the tired beast might graze with freedom, than our traveller was startled by the sudden appearance of a man, springing, as it were, out of the ground.

"A Gipsy—that is plain; and it is almost as clear that he is a villain. Fox like, the fellow will sleep underground all the day, and pursue his avocations in the night. One may read in his face that the scoundrel is more cunning than brave:" thus said the traveller to himself.

"There may be money, or other valuables in those saddle bags; anyhow the horse is worth money—Nick Yak would give three pounds in gold for the horse. A silent stab, a drug, a secret grave, and all is mine:" thus cogitated the Gipsy.

But neither spoke. Honest men like plain speaking; but righteousness does not yet cover the earth. It is not always politic to tell a man he is a scamp, although

you may be well assured of the fact ; while, on the other side, it would scarcely be *appropos* to give a man information that you are going to murder him ; for in that case he might crack your skull instead. So neither spoke. At length, when the silence was becoming ominous, the elder Gipsy said—

“The gentleman is hungry, Omfra, and will share our humble meal.”

“The gentleman is welcome, Zekla. No doubt he is tired also. A bed of sheep-skins, with a sheep-skin coverlet, is far better than a pillar of turf on the damp grass. He would sleep safely here, as in his own mansion.”

Our traveller thought not ; but he refrained from expressing such convictions openly.

The kettle was tilted, and its contents poured into a wooden bowl of large capacity. Some bread (not the cleanest in appearance, nor of the finest quality) was portioned out upon the grass ; their guest was supplied with a wooden spoon, along with themselves, when each and all began to devour the stew. It was not bad, for meat greatly preponderated over vegetables. But what sort of meat—mouldewarps and prickly-hochins ? Not so ; there was a full flavour of mutton about the stew, which caused the guest facetiously to inquire if it was from sheep of their own growing. But the question elicited no answer, save what might be interpreted from a prolonged grin.

It was now their guest's turn to be hospitable, and (although liking him not) he asked the Gipsy if he would have a smoke ; for tobacco was then coming into use amongst the upper classes.

Omfra signified by an ugly grimace that to him smoking would not be pleasurable.

Would he have a drain of brandy ?

Yes, with many thanks : brandy was very good.

So a leathern bottle, well filled with brandy, was taken from the saddle-bag ; about half a gill of the spirit was poured into a leather mug, the liquor being afterwards partially diluted with water. Ever courteous, their guest first offered the (loving ?) cup to the gipsy ladies. They quaffed. The elder crone said such liquor did warm the cockles of her heart. Omfra, also, took an

especial draught : he smacked his lips, but said nothing. It thus happened that by the time this vessel reverted into the hands of their guest, there was only a small drop left. The dose was repeated, with still more evident satisfaction on the gipsy side ; but our guest sipped only very little, while smoking his rare Virginian weed. Why was he so liberal with his beverage ? Was it from a pure spirit of good fellowship ? Not altogether so. He knew that good liquor usually makes people garrulous ; and he wished to glean something of the history, habits, and religion of Gipsies. Scholars have hoped to trace the origin of this strange race from scraps of language peculiar to themselves ; but the evidences are very slight, for, unlike the Jews, they have never possessed a distinct written language. It may be that had the Jews not been the repositories of sacred writ—which is in part a genealogy of their own race—even their history might now have been as obscure. In nearly all respects, except a propensity to trade, and thereby acquire money, there is a marked resemblance between the Gipsy and the Jew. One very distinguishing resemblance is, that they never assimilate with, or merge their individuality into, the people among whom they dwell. Thousands of years have elapsed since the command was issued—Thou shalt not take to wife any alien daughter, nor give thy daughter to an alien's son. Methinks I see some English girl pout her rosy lips, saying—"It is because the daughters would not have them." I am not quite so sure about that, my dear. Many a nice girl does happen to marry a queer sort of man, and *vice versa*.

This was not the first time our traveller had fallen in with Gipsies ; but he had never been able to satisfy his mind upon two or three important points. Personally, he was inclined to identify Gipsies with the lost tribes of Israel. But surely, thought he, there must be good in them, supposing they spring from the loins of Abraham, who was the "Friend of God," and delegated Father of the Faithful. Moreover, if this pedigree is correct they will cherish some latent traditions of Israelitish precept, and Divinely appointed ordinances.

Of their public character the guest was clearly insighted—they were a lying, theiving, treacherous, re-

vengeful set. Still, however low in the scale of civilization they outwardly appear, caste, honour, and even high principle may exist amongst themselves. So when the bright eyes began to sparkle, with more than usual lustre, he (the guest) began to ask questions, and provoke some gipsy talk.

"Who are you, and whence do you spring?"

"Egypt was our home: we were of the royal family of Egypt."

"Indeed."

"Yes."

"I was just thinking that if all of you returned to the father-land, there would be no fear of the throne becoming vacant for want of heirs. But what made you leave home, and wander like—a—like Gipsies throughout every part of the globe?"

"We were driven out by conquest."*

"You met with foes; and so became the foes of every other race?"

There was no reply.

"Do you believe in a God; who has created all things?"

"Listen: there is the earth on which we live—I can see it, and feel it: this is the *body of Nature*. There are hidden forces which always are active, which will never cease to work. These are the *Spirit of Nature*. I believe in nothing else."

"But you admit right and wrong? And how can there be a law without a Law-giver?"

"There is no law but necessity, or that which springs from the operations of Nature. I see a sheep nibbling its food (what matter does it make to the animal on whose land it feeds); I, being the strongest, take it, because to live is a necessity: the wolf or the fox would do just the same. You relish the mutton because you are hungry. I only take what I want; and the grazier has no real need for a hundredth part of the sheep he calls his own."

* In 1517, Selim the Sultan conquered Egypt, when large numbers of the native population chose voluntary exile, rather than become subservient to the Turkish rule. It is at least a curious coincidence that hords of Gipsies from this period began to infest every kingdom of Europe, where they were utterly unknown before; and from that time forward they have continued to live a vagrant and disreputable life.

“ With these principles the world would soon become all anarchy, rapine, and destruction !”

“ Certainly it is wrong ; altogether wrong. Listen to me. A race of men live in a great country—have lived there so long that the sayings and doings of their forefathers seem to go back, even to the beginning of mankind. Well, a people stronger than they come ; kill, conquer, and reduce such as remain to slavery. They prosper, and make the country into a greater nation. This is right. Your God laughs at the great robbers, and wholesale murderers, because they are strong : it is only in little things that He is vindictive. The right is always with the might ; and men square the divine law according to their own wants and wishes.”

The guest soon saw that argument was useless ; he could not make the Gipsies understand that retribution was for nations equally with individuals ; that there is no such thing as great and small in moral turpitude, for the man who would steal a farthing, with deliberate intent, would grasp a sceptre if he found a relative opportunity. His gipsy theories received a shake, however ; and he began now to refer these principles to a Brahminical origin. Still, he thought it would not be impolitic to hazard a personal test. So he said—

“ I have 9s. concealed in my saddle-bag ; my own money, and placed there for necessary expenses : supposing you were to rob me of that little store, could the act be justified ?”

The Gipsy protested, in the most loquacious manner, that he contemplated nothing of the kind ; that he would rather be famished for a week than rob *him*.

“ Well, have a drop more brandy : you may drink that without compunction, because it is a gift.”

They all willingly re-imbibed.

“ Now for a song. I have heard the gipsy melodies spoken of in high terms, and wish to hear one.”

The half-naked urchin, from a motion which he quite understood, disappeared into the cave, and brought out a tambourine. Tilda, the younger woman, seized the instrument, as if she loved it. Then Omfra commenced a ditty which had all the sigas of being impromptu. First of all there was a slow chaunt, led by the man,

supported, not inharmoniously, by the two women :—

The sunbeams are free ;
The moonbeams are free ;
The earth is all free,
For the Gips—e—e.

Then followed a tambourine symphony, very well executed.

And now it might be seen—judging from a flash lighting up the eye—that the melody would change.

OMFRA : We poison the sheep ;
ZEKLA : And cozen the girls ;
TILDA : And live as we list ;
ALL THREE : Hurrah ! for the gipsy life.
Hurrah ! for the gipsy life.

Then, while the old woman beat the tambourine, Omfra and Tilda joined in a frantic dance, gesticulating wildly, and performing such evolutions as spirits might do, who hardly condescend to touch the earth. Their guest had never before seen anything so wonderful, and confessed to himself that the sublimity of dancing is equal to an epic poem.

In was now the guest's turn to furnish a song ; and he commenced as follows :—

The Chieftain he sat in his chair of state ;
For a mansion had he on a hill ;
Through the window he looked round his large estate,
From that mansion he had on the hill.
But the sight of some gipsies awakened fierce hate,
In that mansion that stood on the hill.

(SOLUS—Those thieving varlets are here again) !

So he swore, and then issued his stern mandate,
Through that mansion of his on the hill ;

(SOLUS—I'll have the rascals hung, without trial by jury. I'll—)

“ Now be moderate ; the Gipsy blood is soon roused, and it might not be pleasant in the midst of a quaver to find yourself felled to the ground.”

“ Talk about felling, that is a game which two of us, perhaps, might play at ; always supposing that the women will not interfere, but see fair game.”

“ Well, would you like to have a turn at ‘ double-stick ? ’ I won't hurt you.”

“ Yes, if you please. I won't hurt you.”

Accordingly two strong ash saplings were prepared, and they played, like King Richard and Robin Hood, for love of victory. Our traveller was an expert fencer ; and thought in this exercise to beat the Gipsy. But he was mistaken. After a number of successful feints, the Gipsy would seize an opportunity, and deal his opponent a gentle tap on the head.

Suddenly, however, Tilda came up to her champion, and whispered something in his ear. Then, turning to their guest, she said :—

“Hush ! Would you like to see a maiden—rich, but fair ; and hear her fortune told ?—Yes ? Then hide yourself awhile with Omfra.”

CHAP. IV.

A YOUNG DAMSEL, AND MISCHIEF.

Our traveller would not follow Omfra the Gipsy into his cave. No ; for there the rascal might take unfair advantage, and stab him ; so he crouched on the ground, under cover of the mound. It was satisfaction to know that the pistols were safe within his doublet. He listened and looked. It was one of those nights which is never quite dark, for no sooner does the sun sink to rest than the moon begins her rule. While the young man looked and listened, a few interrogatory thoughts passed quickly through his mind. What sort of a lass can this be ? It is not quite decorous for a proper-minded girl to be roving at this time of night. But allowance must be made ; perhaps she could only escape surveillance thus by stealth ; and I can estimate the power these gipsy scamps may exercise over a confiding maiden, who has one absorbing desire, the attainment of which is alone requisite and necessary to make a Paradise.

At length the girl appeared in sight, advancing nervously with cautious steps, which spoke of perturbation in the mind. Our traveller did not get, at once, a good view of her face, because, with hood or drapery, the head was half concealed. Her feet and ankles were most exquisitely formed—these he could observe, being

in a horizontal line with the eye. Her form seemed perfect symmetry ; and (not to speak it profanely) voluptuous ; so round and plump it was, but nowise gross. Her voice was musical ; it had that silver chord, which vibrates full and clear—just like a sweet-toned bell—and never jars.

“I’ve brought it, Zekla.”

“What a piece of gold wrapped up with charcoal in a docken leaf ?”

“Yes ; it is here.”

“But did you kiss the docken, and say :—MEZAPY, HAPPATY KAN ?”

“Yes ; I observed it all.”

“Good, sweet Sybil. Now put the charm in my keeping until Friday.”

“I must have it back on that day, Zekla, because father gave it me to purchase stuff at Doncaster, and I shall be going there next market-day.”

“It will be all right.”

Yes, old hag, thought the young man, it will be all right, so far as you are concerned ; but this maiden will never see her money more, unless I can compel you to disgorge it.

“And now, let me see thy hand, Sybil Yak, for the charm will help me to resolve much of the future.”

“Well, here it is. But, first of all, tell me something of the past ; for the clearing up of one mystery would yield more satisfaction than any knowledge of the future. Who was my mother ? I ask this question of father (if, indeed, he with whom I dwell be such, which I can scarcely believe), but he answers me only with evasive replies.”

“Thy mother had the blood of nobles in her veins ; and tenderly did she nurture thee.”

“My infancy is, as it were, a blank. I go back to the very earliest recollections, but my mother’s image is not there ; no record of affectionate caress, or gentle chiding : it is all a blank. And yet, she may have formed my lips to speech ; watched the first essay of those tottering steps, and shielded me from danger.”

The elder Gipsy coughed, impatiently ; she also frowned.

The stranger listened with an admiration akin to love.

"I think sometimes, nay, such conviction grows upon me, that the bleak house on Rossington Common was not the place of my birth. They call me Sybil Yak. True, I owe duty to the man whose name I bear ; but there is no affinity of soul between us. He with whom I live plighted no troth at any church's altar—this fact is known to all. Am I then a ——. Tell me, who was my mother?"

The Gipsy scrutinizes Sybil's hand for some moments in silence; then, releasing it, says—

"Thy childhood is like an open book before me. Miles away, there stands a grey stone mansion, surrounded by a park. There are many trees about ; and a deep lake in the valley below. The lord of this mansion is a soldier, proud and stern. The lady is very beautiful, and worships her husband, who is in manner nowise harsh to her. They have wealth, high birth, and all those attentions which retainers of low degree can render."

"Is there a child in the house?"

"A daughter."

"Go on, Zekla. What does thou see further?"

"It is morning. A nursemaid and child wander towards the lake, attracted by the swans. The child is two years old, or rather more ; so that she has only just began to walk and talk. Suddenly, when near the pond, a dark man appears, and snatches up the child ; then, producing a weight and some rope, he begins to tie them round the child's neck, previous to throwing his burden into the lake. The maid flies in terror to give an alarm ; but when the lady mother comes to the place, surrounded by menials, there is no sign of child or murderer."

"And was the daughter ever recovered?"

"They do not find her: the lake is dragged over and over again, but they do not find her."

Sybil muttered some words, as if speaking to herself: ——"Perhaps he only made belief to drown the child. May be he carried her off instead. If all that Betsy (an old female servant) says be true, gipsies steal and traffic with children, sometimes from revenge, and sometimes for gain."

"Betsy tells lies, child ! Gipsies do not steal bairns."

"Well, never mind whether they do or not; let us keep to the point. I ask for information of my mother and you conjure up visions of a great mansion, and a missing child. What is all this to me?"

"Everything."

"What! No it cannot be."

"Thou art that child."

The maiden stood, silently; but the blood had a quicker motion through her veins. A thousand little circumstances rushed upon the memory, all more or less favouring such a startling disclosure. Was she not the child of a wifeless house? Had not all efforts to discover who was her mother ended in total disappointment? But internal evidence was strongest. Whence did those aspirations spring? If she had been born of some gross serving-wench, her mind would be in harmony with the lot. But there was ever present a proud consciousness of superiority, a conviction that her parentage was far removed from Nicholas Yak. And this last consideration appeared to unloose her tongue, for she exclaimed—

"And my parents?"

"They are still living. But I cannot go further into particulars on this point now. On Friday, when the pledge is restored, I may tell thee more."

"And now for my future destiny."

"Good; now for the future; and first of all in respect to marriage. Hold thy right hand closer to the fire. I see. Before many moons are over thou wilt be married; and in due time bear a child."

"O, gammon!" replied the maiden.

"Its true."

Sybil jerked her head, and poohed; yet it was only by an effort that she could hide a smile of inward satisfaction. "It is easy to tell fortunes," replied the girl; "but how can I believe in such predictions without an atom of proof? You first bewilder me with the story of a lost child, and then prophesy a speedy marriage for myself. Psha! it is easy to prophesy smooth things, but where is the proof?"

"Listen; before the clock at Rossington strikes twelve, a young and handsome cavalier will cross thy path, and whisper words of love."

"That will be soon proved. If it should happen—which is very unlikely—then I might be compelled to believe the rest."

"It will come to pass."

"Pooh! the thing is so improbable. A young and handsome knight—Did'st thou not say knight?"

"I said cavalier."

"Ah, well; he is almost as precious: a strange cavalier, young and handsome, meeting me alone, so late at night: then whispering words of love! Will they be true words, Zekla?"

"Nay, lass, find that out thyself."

It might be that Sybil thought herself scarcely well adorned to meet on intimate terms with a gay cavalier; so the maiden dropped her careless hood, from underneath which fell the raven locks, in wild profusion: these soon with nimble fingers were arranged to perfect order. Her pelisse was scanned; each speck and bit of dirt cleared with impatient hand; her skirt was smoothed down; and next the pretty feet received inspection. But, Oh, those hideous shoes, clumsy and greatly worn! She turned them round and round, in the light of the moon. She said, half musingly—'He will not mind my shoes.'

The secret worshipper would have kissed the well-worn shoes, because of the treasure they contained. He did'nt, there and then? No, he restrained himself; but he prayed for aid to the Holy Virgin, and vowed to kiss those luscious lips, with heavenly rapture. In this matter he showed discrimination. Yes.

And now after Sybil had given the Gipsy women an explicit undertaking to meet again on Friday, the maiden resolved to return home. A few minutes afterwards our traveller ventured to leave his hiding place, and seeing that her loved figure was scarcely distinguishable in the distance, he questioned the Gipsies respecting her route. The old hag showed him how by making a circuit under some trees he might advance upon the maiden suddenly, where she would still be far from any human habitation. So the young man left his horse and saddlebags in pledge with his entertainers, and, like a gallant cavalier, went forth to give escort and protection to the lovely girl.

The lovely girl just at that moment was vexed with herself ; indeed just then she esteemed herself as little better than a fool. Moreover, the Gipsy arts seemed very like an audacious imposture. Moreover, parting with that piece of gold added to her vexation ; for the girl had no dishonest intention, and the money was not hers to pledge. What had caused this strange revulsion of faith ? A sudden conviction that the promised meeting with a handsome cavalier was nothing better than an impudent deception : this shook her credit in the Gipsies' supernatural agency. Instead, therefore, of being alert to every external object, as at first, she became self-abstracted and gloomy, so that even a "gay cavalier" might almost have passed her without recognition. Thus our hero approached within a very few yards of the spot, before she became aware of his presence. But when Sybil did observe him, the effect was almost tragical. She uttered a faint cry, and would have swooned but that he caught her in his arms, and tenderly chafed the throbbing temples : her head rested upon his breast, and he kept that mysterious flicker of consciousness from becoming temporarily dead. No wonder the effects were so violent, when an old faith, albeit bred of superstition, was being so suddenly re-established. She lay there, upon his bosom for a moment, after her mind and nervous energy were restored, for there is always a confiding influence in sympathetic love. He would have kept her there for aye ; our cavalier was not weary of supporting that lovely form. But true love is also honourable ; he would have deemed it almost profanation to steal a march on helplessness, and kiss those throbbing lips.

Womanly dignity at length began to assert its power ; the maiden with a tremor started to her feet, and strove to evade his gaze. Our traveller was the first to speak.

"Pardon me," he said, "for occasioning such alarm ; but seeing a lady, unattended, at this period of the night, I was approaching to offer an honourable escort."

"My thanks are due for proffered courtesy and protection. You may well think it strange that a maiden should be out at midnight alone, but the fact is I had been keeping an appointment."

Our traveller thought this a good opportunity of testing Sybil's character ; so he smilingly observed—

“I am sure he cannot be worthy of such affectionate regard, and leave one so beautiful to return home alone. I would not do it.”

“You mistake me, sir ; my appointment was with a woman.”

“Ah, perhaps she is suffering ; and so, like an angel of mercy you have sped to succour. Duty thus rises superior to outward propriety.”

The maiden hung down her head, but did not answer. Being ashamed to confess the truth, she left him to arrive at whatever conclusion he desired.

They were now dissembling, both the young man and the young woman ; and while this lasted there could be little satisfaction in communion. Certainly under present circumstances, Sybil had the better plea for reticence ; this fact our traveller acknowledged to himself. It behoved him, therefore, to begin the work of confession.

“Sybil,” said he, “may I accompany you home ?”

The maiden was startled. “How do you know that my name is Sybil ?” said she.

“The Gipsy called you Sybil.” Then he recounted how, as a traveller, the smoke had directed him to the Gipsy camp ; and how, partly from a love of adventure, and more to discover knavery, he had been a voluntary listener to what passed between them. Perhaps the maiden might have resented this conduct as unworthy of a gentleman, had she not unmasked the Gipsies' foreknowledge in predicting their meeting. Furthermore, our traveller convinced her that these Gipsies had the key to her early history, and that he should never rest until her identity was established. So on parting near the abode of her reputed father, he extracted from Sybil a promise that she would meet him again in a certain place.

CHAP. V.—THE MYSTERY.

It was long past midnight when our traveller parted with Sybil at the gate of Nicholas Yak. Under ordinary circumstances sleep would have been very desirable, for he had ridden many miles, with but a short interval of rest. But where was he to get it? For that night, at least, he would not take up his abode in the same house with the maiden; since, if discovered, explanations were sure to be demanded which might prove embarrassing. Not that anything had transpired on his part that he would have been ashamed to acknowledge; still, there was a reasonable conviction in the mind that he ought not to lodge there without the master's knowledge. No, he was not cold and prudish. Inclination pointed one way, honour pointed the other way: but what is a man worth if the former proves the prevailing influence? He is then a mere ephemeral thing of shreds and patches. The maiden would have liked him for their guest, and let fall a hint about calling her father up; but the suggestion was soon quashed, for how could the fact of a cavalier being abroad with Sybil at midnight be explained? So they parted, with a mutual pledge to renew each other's acquaintance on the coming night. What! another secret midnight interview? Yes, it was so decided; unless some unforeseen circumstance should demand a speedier meeting.

What did he do next, our gallant cavalier? He wandered dreamily, like thousands of young men have done, when the shadow of an angel's presence still perturbs the soul—earthly angel, of course. The film of night appeared to grow thicker, the silver haze deepened gradually into a cloudy brownness, so that it became impossible to distinguish objects at many yards distance. He walked half a mile, or so, in one direction; and then walked back again, afraid lest he should lose all recollection of the place. At length, feeling quite jaded, he sat under a tree, waiting for the first gleams of the rising sun. But his mind was not at rest. His thoughts were of the maiden named Sybil, and particularly intent upon this mystery of her parentage. Said he to

himself :—That old woman knows more about the matter than she would care to acknowledge, I am sure she does. One of the gipsy tribe—perhaps this Omfra—stole the child. But how did she come into possession of the man called Yak ? It is scarcely likely that he would buy a child ; but one cannot tell, he might make some agreement with the gipsies, and adopt her as his daughter.

Daylight at length broke, and not long afterwards an aged man came that way. He had a long stick or staff in one hand, and a dog followed at his heels. He was evidently going out to look after the sheep, and would have merely stared at our traveller in passing, had not the latter accosted him.

“ It’s a fine morning.”

“ Eas.”

“ Are you yeoman Yak’s shepherd ?”

“ Eas.”

“ Have you lived here long ?”

“ Ow lived wi Isaac, Nicholas’s feyther ; and all along sin.”

“ What is this (holding up a large coin) ?”

“ A good groat. Hoo-oo !”

“ Well, it shall be yours when you tell me who was Sybil Yak’s mother.”

The old man gave a preliminary grin and answered—

“ Mistress Soyble would gie more nor a testoon (shilling) to naw that. I doant naw her muther ; nobody does ; though I ’specs she hed a muther.”

There was no gainsaying such a conclusion, however unsatisfactory the information might appear.

“ When did you first see Mistress Sybil ?”

“ When shue wur a bairn, no heavier nor my dog.”

“ But there would be a woman in the house to nurture her ?”

“ Aye there wur Nimble Nan :—we called her so ’cause shue was allas trotting about.”

A bright thought struck the questioner. Next to her reputed father, this woman could furnish the best information.

“ And where is Nimble Nan ?”

“ Doant naw. Shue left here a dozen year cum Martlemass.”

"But has she no relations in these parts?"

"A bruther o' hers lives at Bawtry now ; but haue niver seen Nan for years."

"And what is his name?"

"Natty Benton."

"That will do. Here is the groat."

The shepherd had got what he desired, and went his way : our traveller had got evidence which he considered well worth a groat. Now he resolved to act. But before going to Bawtry, it was necessary to recover his good steed and saddle-bags, although some difficulty presented itself in finding his way back to the Gipsy camp. At length he did find the exact spot ; there was the mound, and there was the charred place where the pot had been boiled : but of Gipsies there was none. They had *decamped*, taking both his horse and saddle-bags. The young man said to himself—What a fool I have been ! He did not repine at having offered an escort to the maiden ; he did not regret the time passed in Sybil's company, all this was a precious memory ; but after seeing her safe at home, he ought to have gone straight back to where his horse was grazing. True, in the meantime, those rascally Gipsies might have shifted their quarters ; but there would at least have been a faint prospect of overtaking one or more of them, since the good steed could not carry all four, namely, Omfra, Zekla, Tilda, and the boy. It was fortunate that, while secretly listening to the old hag telling Sybil's fortune, our traveller had abstracted what money and other valuables were contained in the saddle-bags. Moreover, if he had not loitered when he did, it is probable that the slight clew to Sybil's history might have escaped him. That was one point gained by shilly-shallying. And now what was to be done ? Our young cavalier walked round the deserted camp, but found nothing there worthy of interest ; even the old iron pot of foreign make had been removed, or hidden in some secure retreat. Said he to himself—I will have justice ; for have I not a legal claim to get the gipsies hung ? Have they not stolen my horse ? Yes, and my saddle bags, too. I will have them hung. Then came the sequel (but only in imagination) ; how this sentence of death would surely result in a voluntary confession of

Sybil's abduction. But before all this could take place (the confession and the hanging) it was necessary to catch his victims ; no easy task when one considers that the gipsy scorns the nationality of a local register, and claims the whole world for his parish. First of all he must go to Doncaster, and get a warrant. He had passed through that town the day before on journeying here, and knew that Hugh Childers, who had lately built that fine mansion called Carr-house, would be very likely to assist him. So our traveller (a pedestrian now) left Rossington Park, with the large dark line of Hunster Wood to the left, and took the hill-side route, verging towards Cantley. It was not long before he observed the beautiful tower of Doncaster Church peering out of the valley. The church clock struck five just as the young man entered the enclosed grounds leading to Carr-house. It was scarcely likely that the worthy proprietor would consent to be disturbed with public business at that early hour ; nay it was very questionable if he would be out of bed. All doubt on this point was soon set at rest, however, by the appearance of the magistrate himself in riding costume with a whip in his hand. The stranger accosted him with that dignified courtesy which becometh a gentleman, and then requested a few moments' attention on public business. Thereupon he led our traveller into a private office, and then demanded the nature of his application.

"I want a *warrant* to apprehend some gipsies."

"Aye, marry, that you shall have with pleasure. They are a pest to the neighbourhood, and I would imprison them all. Only last week I lost three fine young kine, the hides and fat of which I am credibly informed were purchased by a rich grazier not a hundred miles from here."

"In that case, it may be, the receiver is equally culpable with the thieves."

"Very true ; but the man I allude to is not only rich, but cunning."

"Do you mean Nicholas Yak ?"

"Hem ! I mentioned no names."

"No, but I did."

"What do you know about Nicholas Yak ?"

"Nothing whatever ; I never spoke to the man ; never saw him."

"Then what right have you to make insinuations?"

"Your worship's remarks suggested the conclusion. But we may have an opportunity of settling with this man afterwards; my present business is with some gipsies—a tall, dark, wiry man, about forty years of age, named by his associates Omfra; a young and not uncomely woman, his wife; together with an old and vicious-looking hag called Zekla, who is evidently mother to one of the two. They are accompanied by a boy, about eight years of age, whom it will, perhaps, not be necessary to include in the *mittimus*."

"I have had information of the lot; they have been encamping for several days on Rossington Common."

"It was there that I met with the varlets; they have stolen my horse and trappings."

"Then they shall hang for it. I will prepare the warrant." (Scribbles.)

"CARR HOUSE, in the County of York, this fifteenth day of May, 16—.—(To WIT)—An Information having been laid before me, Hugh Childers, one of his Majesty's Justices of the Peace, by ——"

"What is your name?"

"Leanord Marchmont."

"Leonard Marchmont, of ——"

"Where do you reside?"

"At Otley."

"Otley, in the same county, ——"

"Now, let me know all the particulars."

The young man told him under what circumstances he had foregathered with the gipsies, and even partaken of their meal; omitting, however, all mention of the interesting episode respecting Sybil. After he had finished, the worthy magistrate remarked, that there were one or two circumstances which required explanation. In the first place, if he were tired and hungry, why did he not lodge for the night at some respectable hostelrie on the road; particularly as he must have passed through Doncaster? To this our traveller replied, that he intended resting for the night at Bawtry; but, impelled by curiosity on seeing the smoke, and personally not adverse to a midnight adventure, he made their camp a temporary resting place. Being somewhat

of a philosopher he had wished to make a study of the gipsy character.

"Very dangerous curiosity," replied the respectable Hugh Childers. Let me give you a word of advice. For the future, always avoid low, disreputable company. Youth, I know, is fond of adventure ; and it is, at least, a proof of courage that you trusted yourself alone with such a company of rascals. But further, I wish to ascertain whether the gipsies used any violence, or whether you offered any resistance to their stealing the horse ?"

"I did not even see them take it away."

"What ?"

The young man hesitated, and looked perplexed.

"I understand, you had fallen asleep ; and did I not believe that gipsy women are rarely unchaste (they have a Jewish pride of their race), one might infer that somebody had been bewitched by the dark beauty."

The young man exhibited disgust at the bare idea of embracing such an object.

"I have only to add, that it is a thousand to one against you ever recovering the horse. The gipsies have a method of colouring, and otherwise disguising an animal, that you could scarcely swear to it, on the nonce, in an open fair. The scoundrels, moreover, will be difficult to track. But we must do our best ; the whole party of them cannot by this time have escaped far. Two constables, well mounted, shall scour the district in opposite directions. Meantime it is very desirable that you should remain in the neighbourhood for a day or two."

CHAP. VI.

EXTRAORDINARY COINCIDENTS.

So far, so good. The myrmidons of the law will get upon those gipsies track, if they can. Meantime what shall I do? Wait? There is a chafing misery in waiting; I, also, must help to track the rascals: thus resolved our Cavalier within himself. It happened, singularly enough, that circumstances favoured his resolution. A dirty, ragged urchin was seen to move suspiciously across the "Low Pastures," who, when observed, rushed towards the covert of some magnificent trees, which skirt the mansion on that side nearest Doncaster. There was a mutual recognition, a flight and a pursuit. The lad was an excellent runner, but his legs were short; and it soon became evident that there was but a poor chance for him in a straight race. On reaching a fine avenue of trees, the urchin began dodging round and round the boles: he would have climbed up one of them like a cat had he not suddenly been caught by the left leg, and hurled to the ground. Kick he could not, but the little savage used his finger nails to some purpose: his mouth, also, was just closing in a terrible grip of the strong man's hand, when the latter seized the matted head with such a lug, that the urchin gave forth a yell, which must have been heard at Doncaster. It sounded so horribly through Carr House, that the serving-men, headed by their worthy master, rushed to the place, anticipating nothing less than murder.

"Ho! ho!" said worshipful Hugh Childers, "What, is this one of them?"

"This is one of them; a true scion of the parent stock."

"Then the two women mentioned in the deposition will not be far away. This lad has evidently been employed as a spy on your movements. Still, I don't believe that we have any authority to detain him," said the worthy magistrate.

"But look at my hands: surely they are evidence of an assault."

"On his side, it may be pleaded that what he did was only in self-defence. You pursued him?"

"Yes."

"And seized him by the leg?"

"Right. But is he not a very Imp of Darkness; a vagrant rascal; and taught every false way?"

"Ha! ha! Yes; I think we may safely lock him up as a rogue and a vagabond."

"Permit me to suggest," said our cavalier, "That you lock the urchin up in one of those strong rooms at Carr House."

"What, turn my mansion into a jail! You are very reasonable, worthy sir."

"I have a special reason for the request."

"I see; you imagine the gipsies are not far off; so that an attempt will be made to communicate with, and perhaps rescue, the lad in the night."

This supposition was strengthened by the fact that when the urchin found resistance unavailing, he gave one of those sharp, shrill whistles, which travels so far.

The little demon liked not the idea of captivity; he kicked and struggled with all his puny might, until three strong men seized his legs and arms; thus carrying him off triumphantly.

Worthy Hugh Childers laughed immoderately. Said he, "If the elder gipsies display as much pluck in proportion to their strength, it will be no easy task to capture them." At length the urchin was safely locked up in a small room or office on the ground floor attached to Carr House. The door was strong, and the window was small; so there appeared but little prospect of his getting out. Our traveller then borrowed a horse, on the plea of tracking the gipsy women; intending, meanwhile, to discover, if possible, another woman, known by the *soubriquet* of Nimble Nan.

On his journey to Bawtry our Cavalier forsook not the highway, which, being a good trunk-road from London to the "north countrie," was much frequented. At one time he overtook a sturdy yeoman, on an ambling nag, with his jocund wife on the pillion behind. There was a courteous greeting; and the good dame smiled complaisantly, with her loving arm round a honest breast. By-and-bye a distant horn is heard, and the

Royal Mail comes dashing past. Who could resist the impulse to trot alongside those gallant "bays." Not our young traveller, assuredly: he kept their paces for a mile or so, ever and anon exchanging some opportune remark with the coachman, and the gentleman on the "box-seat." At length a pleasant little town appears in sight; when our traveller, mainly to collect his thoughts for the business on hand, lagged behind, and so let the mail-coach precede him to the change-house. Not long afterwards, a pedestrian came in sight, who, judging from his costume and sedate manner, any one would conclude to be a priest. Our traveller made obeisance, receiving a comfortable benediction in return. Then, thinking his reverence would know if any such person resided in the neighbourhood, he said—

"I am very desirous to find one Nancy Benton, better known by the cognomen of 'Nimble Nan.'"

"A worthy woman. She is not *nimble* Nan now, however; having had a severe paralytic stroke, some months ago."

"Has this stroke taken away the use of her speech?"

"No. Her left arm, and also the left leg are seriously affected; but her speech is nimble as ever."

"Good."

His reverence looked at the young man suspiciously."

"Do not misunderstand me, reverend father; I do not mean that the affliction is good, but feel thankful that I can after all gain conversation with the woman. There is a pent up secret on which she may be able to throw some light."

His reverence looked at the young man enquiringly; but failed to elicit further confidence. The priest did not obtrude his curiosity, thinking, no doubt, that Nancy Benton would confide in him, should the secret be of particular interest. So he merely furnished the woman's address, and they parted.

On arriving at Bawtry, our traveller was surprised to find that a fair was being held that day, for the sale of merchandise and cattle: it was very throng; so that when he rode into that famous hostelry, the Crown, almost every stable was full. On reconnoitering one of the latter, to see if they could squeeze another

animal in, one of the horses became strangely restless. It turned its head ; it danced ; it whinneyed, as if under the influence of a mental aberration. The ostler spoke angrily, and was proceeding to strike the quadruped with a hay-fork, which happened to stand in the corner, when our traveller stayed his hand. "Gently," said he, "except that it had no white heels, and that its tail was longer, I should swear that this nag was an old acquaintance. It very much resembles an old favourite, which I have lost." The speaker went up, and patted it on the back ; at which the horse shewed unmistakable signs of joy. "Faith ! I believe it is Charlie ;" whereupon the nag rubbed its nose against his master's breast, as much as to say—"To be sure, its Charlie. Didn't you know me ?"

"Fetch a pail of water and sponge," said our cavalier to the ostler. It was brought. "Now," said the former, "sponge one of the horse's heels."

No sooner was the water vigorously applied than a white pigment began gradually to dissolve.

"There, that will do. Now tell me who brought the horse here."

"A dark, gipsy-looking man. I believe he is even now in the kitchen, with a neighbouring farmer, trying to bargain."

"I will give a shilling providing you do not lose sight of that gipsy until I return."

In a few minutes our cavalier came back, attended by a constable ; but the man pointed out as owner of this horse was certainly not that Omfra with whom we have formed acquaintance. Still, he evidently belonged to the gipsy tribe, and must answer how he became possessed of the quadruped. So our traveller, turning to the constable, said, "I give this man in custody for attempting to dispose of a stolen horse, with intent to defraud me, the rightful owner."

The gipsy protested that the horse was honestly come by, so far as he was concerned ; whereupon he attempted to raise a tumult, but two or three "Crown" servants, assisted by the constable, very soon lodged him in Bawtry jail. On returning to the inn our traveller ordered a gallon of best beer for those who had assisted in the capture, and took a "long pull" himself at the

black-jack by way of good fellowship ; then went forth to visit Nancy Benton, *alias* Nimble Nan. Now there were (and are now, I believe) almshouses at Bawtry Spital, for two poor widows, who receive, in addition to cottage shelter, 20s. a year for sustentation. The priest had mentioned to our young friend that Nancy was one of these recipients, and from all accounts she was a very worthy object of charity. Who would refuse God's blessing to the memory of that benevolent man who was thus mindful of the poor. Our cavalier, had he been a Catholic, would have said a paternoster there and then for the repose of his soul. But being of the *Reformed Creed*, he simply and silently revered his memory. Nancy occupied one of these cottages ; and the old woman was evidently dependant on some friendly or neighbourly help for means of locomotion. At present she was propped up in an easy chair ; but there was no one with her. Our traveller, always kindly disposed towards the afflicted, made various personal enquiries, and received a detailed account respecting how "she was took," and what she had suffered. By degrees he came round to the subject on his mind, saying—

"O, bye-the-bye (it is invariably 'Bye-the-bye' when anything very important is coming) I met with Sybil Yak, lately."

"Bless her pretty face ! I hear she has grown up into a winsome woman ; indeed, she was the dearest and handsomest child that ever was born."

"Aye ; she came of a gentle race."

"Sir, do you know her kindred ?"

"Do *you* know her parentage ? Tell me all you know of Sybil's infancy, and I will tell you all I know of Sybil's history ; then, between us, we may be able to restore the stolen child to the home of her birth."

"Did you say *stolen* child ?"

"Yes. You remember who brought her to the motherless home of Nicholas Yak."

"It happened in this way. I had been to look after some chickens ; and, on coming back to the kitchen, found a little child running about on the floor. Said I to myself, 'Where can this bairn have come from ?' There was no one else in at the time, and the little

thing had got her head to a bread loaf—I ought to say that we had been baking, and some of the loaves were reared up on the floor. ‘Poor little dear!’ said I, ‘thou wants something to eat.’ So there and then I made a sop; and didn’t the child relish it? Just at that time, voices were heard at the further door; and peeping out, I saw Mister Yak put money into the hands of a gipsy woman.”

“Would you be able to identify this woman, if she were brought before you now?”

“Yes, I think so; although fourteen or fifteen years may have altered her appearance. I should know her again, nevertheless.”

“Were there any marks about the child’s person that one could swear by?”

“No; her body was free from speck or stain. I preserved a little silken belt, on which some letters are embroidered; and also a coral toy, which was taken from the bosom of her dress.”

“Have you these articles in possession now?”

“I have; and shall never give them up.”

“Except, on the strongest evidence, Sybil’s father or mother should claim them.”

“God speed that, in his own good time!”

“The time will come, Nancy. Before many days are over, I hope to bring you face to face with this very gipsy woman who stole the child; we must then trust to circumstances for a full confession.”

CHAPTER VII.

A GLEAM OF LIGHT ; BUT VERY LITTLE COMFORT.

Our traveller sent the horses on to Carr-house, both his own, which had been so singularly recovered, and the nag he had borrowed. The constable took them ; and that functionary thought within himself that this young man must be a person of distinction to obtain the loan of 'Squire Childer's horse. The messenger was instructed to say that Mr. Marchmont would himself follow in the morning. You can guess, reader, why he did not return at once to Carr-house : there was the appointment with Sybil Yak. But after experiencing all this fatigue and excitement, for nearly thirty hours, the physical energies gave way ; so that sleep became an absolute necessity. The hostess at the Crown Inn said he would not be able to sleep there, with such a perpetual noise underneath ; he vowed that, just then, he could sleep like a top, anywhere : at all events, he was anxious to try ; and thereupon retired to a snug little bed-room on the top storey. He *did* sleep, for several hours, until the room became clouded in the shadows of night. The inmates of the Crown were puzzled to know why he was getting up when they were ready to retire. Still, the explanation sounded very feasible ;—he expected to track one or more of those gipsies, who might communicate with or attempt to rescue their companion in the night. This was partially true ; inasmuch as the duty would be delegated by him to a constable (with the aid of one or two other persons, whom he might pay for watching), while he kept another and very interesting appointment.

Sybil was not at the appointed place ; our cavalier waited upwards of an hour, which to him, under the circumstances, seemed an age, but still she did not come ; so he resolved to reconnoiter the dwelling of Nicholas Yak. No suspicion crossed his mind that the maiden was unfaithful (unfaithful to her promise) ; no, some unforeseen circumstance must have prevented her

keeping the appointment. Before he reached the house, a gleam of light through a chink in the window-shutter shewed that somebody was up. Could it be Sybil with an unexpected friend ; or was Nicholas Yak carousing, or doing business with a suspicious visitor. Approaching nearer, angry tones were heard coming from a female voice, which, certainly was not Sybil's. Now, under ordinary circumstances, the 'young man would have scorned to skulk and listen ; but he entertained an unfavourable opinion respecting Nicholas ; and hoped to get some influence over the man, which he could afterwards use in Sybil's favour.

" I tell you, the lass is over head and ears in love with him : " thus screeched the alto.

" Well, then, she must scramble out ; sooner the better : " thus rumbled the bass.

" That's easily said ;—give him up, and think no more about him. But, let me tell you, the young man will not give *her* up, until he finds out where she was born. I, like a ninny, dropped some hints in his hearing about her parentage."

" The d—l you did ! "

" Yes, more than you ever learnt."

" Look here, Zekla [our Cavalier almost shouted in triumph at the name ; but reflection checked the rising exclamation, and he listened with still greater eagerness] ; I never could quite understand why you brought that bairn to me, and insisted so strongly that I should never part with her. What was the motive for all this ? "

" Vengeance. Her father once caused a son of mine to be hung :—now you have it."

" I thought that gipsies did not do things by halves : revenge would have been complete by sending a child's corpse to the parents."

" So you think. The sudden evidence of death is sharp. Granted. But time deadens the stroke. Now the anxiety alternating between hope and fear, ending in despair, this is ceaseless misery. Sybil's parents will go down to their grave with the doubt unresolved."

The secret listener thought differently : at least such a result would not be if he could prevent it.

" We understand one another," said the bass voice ;
" there are matters between your tribe and me, which

none of us would like to have exposed. You might bother me, and I could get you hung."

"But supposing you betrayed one of us, and managed, yourself, to escape the law; what would the cravan life be worth? Not ten week's purchase."

"Who talks about betraying? Do you think I would give Sybil up, even if the name and residence of her parents were known to me. No. I should feel the parting with her now as much, almost, as if she were, indeed, my own daughter."

"Then watch her carefully, so as to prevent, in future, all midnight or other meetings with the Cavalier."

"Trust me for that. And now have a mouthful of meat and bread, and a drink of beer before you go."

"I have no objections to drink a mug of beer, and carry away a "slive" of meat and bread in my wallet; but look sharp, for there are some miles to walk before day light."

Yes, thought the listener; and in a different direction, perhaps to what she will desire; then he walked some distance, to the cover of a wide-spreading tree, keeping the door in sight, and waiting for her appearance. Presently she came out, and our cavalier followed the old gipsy stealthily for about a quarter of a mile; rightly supposing that if he had confronted her at first she would have returned to Nicholas Yak's house, while he himself might have received a rougher greeting than could be desired. Now, however, there was no fear; so he quickened his pace, and very soon accosted the gipsy by name. Zekla, old as she was, prepared herself for a run; and would, probably, have escaped him in one of those tangled passes of the Common, which *she* knew so well, and he did not. Our cavalier was convinced that argument and persuasion would be useless; so presenting a pistol to her breast he said—

"Do you see this?"

"I see."

"Well, it is loaded; and I shall feel no more compunction about burying the charge in that treacherous heart than in shooting a wild cat." This was mere *braggadocio*. Had it been the devil incarnate in the shape of a woman, he would not have raised his hand against her. He told her to walk quietly by his side;

but when the old woman inquired the direction, and found that their destination was Doncaster, she scowled. A tremor of fear ran through her veins on hearing that their boy was already in custody at the same place.

"Sir Knight," said the old woman, "you are very cruel to the poor gipsies, who did our best to entertain you. Is it for the loss of your horse?"

"My horse has been recovered," replied the young man; "albeit in a somewhat mutilated condition. It is not for that."

"I have made a great mistake."

"A great many, no doubt; but to what do you allude?"

"To Sybil Yak, who is very beautiful; and fit to consort with the best. You know now who she is not, and feel a great interest to know who she is."

"A witch could not have prophesied better. Tell me the real parentage of this maiden; from whom she was stolen; then, when this fact is established, you and your clan shall go free."

Yes, she would tell all; she would give a true and particular account of everything relating to Sybil; and forthwith began in a voluble, but not very coherent, and far from convincing manner, to state the circumstances.

"One day," said she, "we were in Nottinghamshire, near a town called Worksop, where there is a large mansion, and a stream of water runs alongside the grounds; only, it is not a pond or lake, but a river. A nurse-maid and child came down towards the bank, when a gipsy, who is now dead, seized the girl, and acted as if he would drown her; but instead of that she was carried off, and sold to Nicholas Yak."

"Had Yak engaged you to steal this child?"

"More than once before, he asked us to capture a 'she-bairn,' who might be to him as a daughter and a companion."

"And I dare say that, with all his faults, this man has begun to regard the maiden with something like a parent's fondness."

"He will not part with her, willingly."

"Once or twice, on my way through Sherwood Forest, I have had occasion to pass through this said town of Worksop but do not remember seeing any river near

that place ; I believe there is no river in the neighbourhood ; but this point can very soon be ascertained.* Now listen attentively. I am firmly convinced that this maiden, when a little child, was stolen from her parents ; moreover, that you either stole her yourself or know all the particulars, and to whom she belongs. It is of no use beguiling me with lies ; for the law shall be rigorously applied, unless the true parentage of the lady is revealed. Let me remind you that the truth cannot long be concealed. Who was it that caused one of your own sons to be hung ?”

The gipsy woman gave a sudden start ; and even in the dusky night our cavalier could perceive her eyes glaring upon him like a tigress.

“ You see,” he continued, “ I have got at one motive for abducting this child ; and may be able to discover all we want to know without your aid ; but it would save both cost and delay if my questions were answered truthfully ; besides which, none of the parties concerned would like to have all the particulars made a subject of public gossip.”

“ If I tell the whole truth, will you then let me go free ?”

“ Not until the truth of your statement is established ; after that I promise for myself, and can, also, certify for the rest, that no evidence shall be brought against you.”

The old woman stated her position very clearly. “ If,” said she, “ I give information which is proved to be true, what will it advantage me ; since, once in custody, the law must take its course ?”

Our cavalier argued the matter thus :—“ You know all about Sybil Yak, her parentage, and the position in society to which she is entitled ; tell me what you know, and no evidence respecting her abduction, or the theft of my horse, shall be sustained against either yourself or your gang.”

“ How can this be, when you have already preferred a charge of horse-stealing ?”

“ Well, if I refuse to give evidence, who shall say that this horse, which has been received, was stolen ;

* A small river, called the Ryton, does flow past the town of Worksop.

or, indeed, that it was ever my property. The question rests now in a nut-shell—Will you consent to be locked up in a safe place, until I have ascertained the truth of what you may divulge, with the privilege of being liberated the moment I am satisfied, or tell me nothing but lies, and submit to the consequences? Brave it out, if you will; but be sure of this, that no effort on my part shall be spared to discover the parentage of Sybil Yak."

After considering for a few moments, the old hag replied, "I will trust you; knowing that a true gentleman will always hold his word and honour sacred. There was a deadly enmity existing between our tribe and the lord of Heath Hall, in the neighbourhood of Wakefield."

"What is his name?"

"Faber. It is quite true, as you surmised, that he caused one of my sons to be hung."

"How was that?"

Never mind the cause; he did it. For weeks we had been watching for some opportunity of revenge; and when the child came, Molko, who is now dead, seized her, and sold her to Nicholas Yak: there she is now. When you learn from Squire Faber that he lost an only daughter, in the manner described, nearly seventeen years ago, you will have abundant evidence of Sybil's parentage. I have no more to say."

So they walked on for a mile or two, meeting with nothing but whin bushes, with here and there a solitary tree; and hearing nothing but the tramp of their own feet. How subtle are the influences of association. In the still night, our cavalier began to indulge reminiscences of his friend Billicot's new poems, one of which, entitled "Evening Reveries on the Outskirts of a Town," engaged a strong hold upon his memory. He repeated to himself, over and over again, the opening lines, so full of bold imagery, and rich poetic fervour:

The night is all serene, no thunder roars,
Pealing its solo bass and fugue athwart
The gloom profound; no vivid lightning's flash
Rips Nature to her core, and rocks the world;
The merry tribes of woodland's vocal choir,
Whose wildest warblings sweetest melody,
Have left the haunts of men and fled to rest;
And, save the solemn squeak of sickly pig,
No sound is wafted on the balmy air;

Or, ever and anon, the Bantam Sire,
Awakened by the snoring of his dames,
Starting, he thinks some rival foe is near,
And crows defensive cock-a-doodle-doots."

The road into Doncaster appeared moderately well-kept, as it behoved to be, by an ancient Corporation, with an income of several hundred pounds a year ; but, except in the immediate neighbourhood of Carr-house, there was scarcely a tree to be seen. Having descended a gentle eminence, they were confronted by a stone-cross, which seemed to beseech all passers-by to pray for the soul of somebody, whose name was inscribed round the pillar. Neither of them uttered so much as an *Ave Maria* ; but the young man said within himself—"I do not know who the old sinner was ; but one thing is certain, if he attended not to his own salvation while in life, a million muttered prayers can avail him nothing now." This was sufficient evidence that, although a Royalist, in a ticklish time, he was still a genuine Protestant. Just then a solitary watchman tinkled a little bell, and said or sung at intervals his ditty—"Hafe-a-past two, and a-varry-fine night." Now, although young in years, our traveller was not a novice in experience. His first impulse was to attract the watchman's notice by a sharp whistle, or a shout ; but, thought he afterwards, "If we hasten towards him, he may apprehend personal danger, and fly." So they advanced timidly.

"This woman consents to be locked up."

"The duce she does : there's not many in that frame of mind. What charge do you bring against her ?"

"At present, none. But if she can be kept in safe custody for twenty-four hours, there will be two shillings forthcoming at the end of that time ; in proof of which here is a groat as earnest-money."

"I can keep her safely," replied the watchman ; so they went to the house where he dwelt, and the woman was locked up in a strong-room.

CHAPTER VIII.

DISCOVERED AT LAST.

A great mistake had been made—the young man ought to have sent Charlie (his horse) on to Doncaster, instead of to Carr-house: he could see this now. A horse he must have, and that speedily; but here was the difficulty—nobody in Doncaster, at that time of night, would trust a perfect stranger with a nag. How was it likely? Marchmont had a half-formed resolution to call them up at the Sun and Bear; but soon perceived that such an application would be fruitless, without either security (good substantial trunks) or references. True, he had just money enough left to pay for a post-chaise, with relays of horses for one change; but then he might want his fifty shillings, or so, for a greater emergency. All this passed through our Cavalier's mind, at the watchman's door, quicker than we have been able to read it. He must get Charlie; and a conjecture suddenly arose that the groom might lodge in some cottage of his own, apart from Carr-house. Luckily, in enquiring of the watchman, he found that it was so; Jemmy Jagger lived in a cottage not far from Hop-cross-Hill. This functionary recognized our gentleman at once, but what with the difficulty in persuading Jemmy to let the horse go, and the time occupied in getting Charlie ready (for he must needs have a good feed of corn before starting), the clock struck five when our traveller was trotting over the Frier's Bridge, in a straight direction for Barnsdale, and so onward towards Wakefield. But he rested for nearly an hour at Pontefract, and went forth to look at that strongest of all English castles, which even now towered aloft on its rocky elevation, a magnificent ruin.

We shall leave young Marchmont to continue his journey, and turn our attention to a certain mansion on Heath Common, near which the Calder glides so peacefully.

"I dreamt that we had wandered on to a great moor, where there were many snakes."

“ Ugh !—snakes.”

“ Now hear me, Arthur. The surface was almost covered with flowering heather, and tufts of the cotton-rush, and bushes of gale. Still there were open patches where nothing grew but moss ; and, oh ! the colours were most beautiful—red, and green, and purple, with varying shades of grey. Only, I noticed that here, where no heather flourished, the ground seemed very sponge-like, so that anyone passing over it was in danger of sinking.”

“ I have been bogged in such places more than once, when pursuing the black-cock. So far thy dream was literally true.”

“ But are there not many snakes there ?”

“ Plenty ; and vipers, also, and scorpions.”

“ Presently a little rabbit began frisking and hopping about ; when one great ugly serpent, with open mouth, was ready to devour it.”

“ It was only a rabbit.”

“ And yet the little thing appeared to me a symbol of innocence needing protection. I flew to rescue it, and just at that moment the figure of the rabbit seemed to change into a little child, with the very features of our dear lost daughter. Nearer and nearer came the reptile’s head ; when suddenly, some unseen hand advanced to snatch the child away. I called, and waited, but she never came back.”

The husband and father moved towards the window, to hide an uneasy face ; but not many moments elapsed, before a horseman came in view, with his steed all covered with foam : he dismounted at the Hall door. Squire Faber was prepossessed with the young man’s appearance, so that when the servant appeared to say that a gentleman, named Marchmont, requested an interview, our traveller was ushered into the library, and not kept waiting long.

The visitor said : “ I do not ask any pardon for this intrusion, because my mission is important :” then he paused.

The master looked into the young man’s eyes enquiringly ; but finding in them nothing but truth, he said, with only a slight tinge of acerbity. Please ex-

plain to what *important* circumstance are we indebted for the honour of your visit ?”

“ Sir,” he replied, “ you had once a daughter.”

The statement was as positive as it was abrupt. But the proprietor thought within himself :—How can this stranger have become acquainted with the fact, seeing he would only be a boy when our child was lost ?

“ Well ?”

“ She lives.”

At first, the effect produced upon the listener had been stifled ; there was just one spasmodic movement of the eyes, and nothing more. But now the strong old 'Squire grasped the young man's arm. “ Do not trifle with me,” said he. “ Can you prove this ?”

“ I have forced a secret from an old gipsy woman, who sold the child. I have talked with an aged serving woman, who received her then, and tended her for years. I have conversed with your daughter, and given my pledge never to rest until her true parentage was discovered. I know how she has passed for another man's child through all these years, and where the beautiful maiden is living now.”

The 'Squire relaxed his grasp : but there was an air of mingled anxiety and doubt upon his noble face. Said he : “ After so much time has elapsed, how can the child's identity be established ?”

“ To my mind clearly enough. I have got at the motive for her abduction.”

“ What is it ?”

“ Let the memory go back some eighteen years. Did you ever cause a gipsy youth, for some offence, to be hung ?”

“ I did.”

“ What was it for ?”

“ Sheep-stealing. He was not the only one in that gang guilty of such depredations ; but my keeper caught him in the act of carrying a “shearling” away. The rascal was convicted for the theft, and hung.”

“ These gipsies have strange notions of justice. The mother of that young man undertook to revenge his death : because you robbed her of a son, she robbed you of a daughter. She, with the assistance of one or two others, kidnapped, and sold the child.”

"Say you so?"

Our Cavalier nodded.

"But can you prove it?"

He nodded again.

"Then *she* shall hang too."

"No, that cannot be. The old woman, before rendering a true confession, made me promise that neither she nor her accessories should suffer for this crime. I promised for myself (and there was something to pardon on another score); I promised, also, for you. To that pledge must be dated the pleasure of this interview, and the prospect of a speedy re-union with your daughter."

"Society will be well rid of such predatory vermin!"

"True, but I promised, as aforesaid; and my honour is concerned in obtaining the same pledge from you."

"What, if I shall refuse the condition?"

"Then I should be a perjured man to pursue the inquiry further."

"Sir, you put the question forcibly; knowing that the restoration of an only child is infinitely more important to me than the punishment of a dozen rascals."

"Personally, I can have no interest in prolonging liberty to those gipsy thieves; but my pledge must be regarded."

"Well, we will decide upon this matter at the proper season. Allow me to introduce you to my wife; and, what must be of far greater importance, to a substantial breakfast; for, although the day is still young, I dare say you have travelled many miles."

"About twenty-five. For myself I ask for nothing; but there is an old friend outside who really does stand in need of refreshment."

"Right; your steed should claim our first attention." So they both went outside to look at Charlie; and the Squire made some remarks about the horse's mane and tail, which were not very complimentary.

"Were it not for these blemishes," said he, "one might travel a long way without seeing so fine looking a horse. Quarters good (walking round the animal); and what muscular thighs! A capital chest, deep rather than broad: here, you see, there is capacity, which will allow sufficient play to the vital organs. The neck,

also, is beautifully formed, tapering so finely towards the head. Still, the head is well set on; and the nostrils are all that can be desired. I always like a horse for speed with a fine, open nose; since, in hard trotting, or galloping, the animal breathes almost entirely through its nose. Barring the hair, I have not seen a finer horse for some time. Can he jump?"

"Jump!—I will lay a wager that you shall stand near a gate, with your hat on; or twenty men your height, all in a row, and Charlie clears the beaver, with something to spare."

"I believe he's a good horse."

"He is, I think."

"No vice in him?"

"Not a bit; although full of spirit. With a kind word, Charlie would go on, and on, until he fairly dropped through exhaustion."

"The horse must be well cared for while he remains here. Permit me to lead him round to the stables; then you can give all necessary directions to the groom." The young man could easily perceive that his host was especially interested in horse flesh. As they were going to the stable, Squire Faber said:—

"Do you think that horses are endowed with any special or superhuman faculties?"

"No; I should say that all their perceptions are derived from the usual five senses."

"I am not certain; but it appears to me that they have either some intuitive impressions of danger, or else that the organs of seeing, hearing, and smelling are far superior to ours."

"In them, no doubt, the senses are more acute."

"One dark night, many years ago, I was riding over a great common, and had lost my way—it was so dark that I could not see a tree twenty yards off; and under these circumstances thought it best to give my horse the rein, at the same time urging him on, in hopes that he would soon land me at a human habitation. At length the horse came to a full stop; but kept sniffing and snorting. 'Come, my lad,' said I, 'push along,' but he would not go further; so I got off, and advanced a pace or two, with the bridle in my hand; but presently found myself sinking in a deep pit, and had it not been, just

then, that the horse went backward, and thus allowed me to recover foothold, I might have been maimed, or, at least, been miserably entrapped."

"How so?"

"Well, I found afterwards that a number of deep pits had been dug; then covered over lightly with twigs and earth, so that the deer might fall in and be captured. Thus, you see, a horse can discern those treacherous places, when I could not."

The lady of Heath Hall was still seated at the breakfast table when her husband and his guest entered the room.

"Nelly," said the master, "let me introduce you to Mr. Marchmont, who is the bearer of news which will deeply interest both you and me."

The lady rose, and curtsied gracefully; when our traveller could not help remarking to himself what a kind and amiable woman she was. Woman, as a rule, can read a man's character at the first glance; and whenever she thus forms a decided opinion, in nine cases out of ten the estimate will be correct. The guest was happy. All unsophisticated men, and young men in particular, are in paradise while enjoying true womanly appreciation. Thus it was that our Cavalier felt unspeakably happy when this fine, motherly lady smiled him to her side, and pressed him to eat of everything that there was upon the table. This was no formal courtesy; he was welcome. And yet neither host, hostess, or guest were much inclined to talk. The young man felt a satisfactory gladness that Sybil had real parents such as these; the Squire saw that, so far as the messenger was concerned, there was no imposture in his faith; the lady speculated about the nature of this embassy, and kept repeating to herself the husband's words:—"News which will deeply interest both you and me." At length, when the repast was ended Squire Faber turned to his wife and said:—

"My love, this gentleman has brought a message respecting our daughter, who, he says, is alive."

"Then God has heard my prayers," replied the lady. "Every day since she was lost, have I prayed that the Almighty would tell us, before we died, if He had taken her to himself; but if she was still somewhere in this world, that we might see her again."

"Your prayer is now being answered," replied the young man.

"I fear it will be impossible, after so many years, to establish her identity."

"That is what I say," observed the father.

"Why, she will be now quite a woman. Do you perceive any resemblance between us and the lady whom you suppose to be our daughter?"

"Madam, from personal resemblance alone you would be convinced that she is your daughter. But I have stronger proof than this."

Then the master of Heath Hall, turning to his wife said, "Cherish not too much hope; then the disappointment cannot be very bitter. It will be necessary to investigate the matter thoroughly; and to this end permit me to ask in how short a time you will be ready to accompany us in a coach?"

"I can be ready to travel in an hour."

"Be it so."

CHAPTER IX.—ALL IS WELL.

“In the Inn’s best room” (the Crown Inn, at Bawtry*), sit ‘Squire Faber and his lady. Refreshments are brought, but very little is eaten; they look into each other’s eyes, and feel that each other’s thoughts are perturbed. They look, often, toward the door, and are still silent; but feel that the suspense is mutual. After a time, the door opens, when a scene presents itself, which, under ordinary circumstance would have made the ‘Squire wroth: two servants bring in a rickety old woman, bound fast to a chair, while a young gentleman stands smiling in the rear. ‘Squire Faber detested all low tricks and buffoonery. The good lady of Heath Hall had a heart full of pity, when she saw that the old woman was infirm. But why bring her here? Nancy Benton “knew a thing or two,” and this was the proper time to communicate; so after being settled in a convenient position, and she had tasted a drop of something good, our Cavalier proceeded to examine and cross-examine her.

“Tell us what you know about a young maiden called Sybil Yak.”

“May it please you, sirs, and madam; I was hired servant with Nicholas, of Rossington Common.

“Yes.”

“About seventeen years ago, as near as I can recollect, the gipsy woman brought a little girl to our house: that was Sybil, who passes for Nicholas Yak’s daughter; but she is not his daughter.”

“Did you see anyone bring the child in: be very particular in every circumstance?”

“I told you, sir (addressing her questioner) all about it before.”

“True; but this lady and gentleman want to hear all about it, from your own lips.”

“No, I did not see anybody bring the child in; but I heard Nicholas talking with a gipsy about this child,

* An old Crown Inn, not the present hotel, which bears that name.

and saw him put money into the woman's hand before she left. I am sure that money was paid for bringing the bairn to him."

"No doubt it was; only we want proof of this. You did not hear him say; here is the purchase money for this child?"

"No, I did not hear that."

'Squire Faber began to shew signs of impatience. "It is not material to us," said he, "whether a gipsy or some other person took the child to one Nicholas Yak; unless, indeed, we have convincing proof where the little girl was stolen from." Then, turning to his wife, he said in a lower tone:—"This in no way proves that the child was ours."

Our Cavalier caught the words, and answered:—"Wait patiently a little; there are proofs to follow." Then pursuing his examination he said—

"You would scarcely know the gipsy woman again?"

"One cannot tell, seventeen years is a long time to look back; people change so in that length of time."

"They do; still you might, possibly, recognize her: we shall very soon have an opportunity of settling that point. If you can swear positively to the gipsy woman being present, and receiving money, when you first saw this child, we have evidence—not conclusive, I grant, because you did not actually see her bring the child in; but still evidence worth noticing."

"Much more may depend upon the result of my next question. Have you any articles of dress or ornament worn by the child when she was first brought to Rossington Common?"

"I have."

The lady started, and looked towards the speaker with unusual interest.

"Produce them."

The old woman placed one hand, which was but slightly paralysed, under her cloak, and drew forth a little sash or belt, on which three letters were embroidered, viz., A. E. F. The lady turned deadly pale, and it was only by a great effort that she was prevented from swooning.

"She's her mother, sure enough!" exclaimed old Nancy. "I could see that from the likeness there is between them."

"Let me examine that sash."

"Yes," said Nancy Benton; "I can trust the mother with it;" and it was handed over.

The possession of this little relic did the lady good; for the tears coursed down her cheeks while she said:—"I worked these letters myself. This is my child's belt."

"Have you anything else?"

Old Nancy fumbled in her pocket, and drew out a coral ornament, set in silver, but which had been bruised and broken in several places. "This," said she, "I took out from the bosom of her dress."

"Arthur, don't you remember buying this toy when our little Alice was cutting her teeth?"

"It might be so; although I don't recollect it." He was like the generality of men; such trifling mementos were no links in his individual existence. But she recollected it well.

"Would Mr. Faber be kind enough to ring the bell?"

The bell, in those days, was a very primitive and substantial article, resembling very much one which our "town-criers" use now.

He rang it, with some little exertion to the wrist.

Jemima came.

"There is a man and an old gipsy woman in another room," said our Cavalier. "Say they are wanted here immediately."

The waiter backed out curtseying; for in those days waiters studied politeness, and noble visitors were not so rare at country inns.

Only a few seconds elapsed before the curious pair made their appearance, not handcuffed, it is true, but mentally preserving very much the same relation.

"Now, Nancy Benton," said our young gentleman, "you must tell us whether or not you ever saw this old woman before."

"I think I have. I feel sure I have."

"I know she has," replied the gipsy. Squire Faber looked up, and there was a glance of stern vindictiveness in his eye as the paralytic nurse observed:—

"This was the woman who brought that young child to Nicholas Yak's house."

"I did bring her there," replied the gipsy.

Our Cavalier drew the constable aside, and whispered a few words privately in his ear ; whereupon he and the old gipsy woman left the room, in much the same relation as they entered it.

The lady, turning first to her husband, remarked that to her mind there was now not a particle of doubt about this maiden being their own daughter : then she addressed our Cavalier, adding—that they were under a weight of obligation to him which no words could express.

The young man stammered out something, but he was not happy in his reply ; for he dare not, just at this moment, give expression to all his hope.

How true it is that often, in the most critical situations of life, our joy or sorrow does not rise to the occasion. A greater earthly boon could not have been granted to the wealthy Fabers, of Heath Hall, and yet their satisfaction was simply tranquil.

* * * * * *

Three hours have passed, the scene shifts to a large timber hut on Rossington Common, and we have now to describe, very briefly, the concluding link in this chapter of evidence. Our lady and gentleman have brought old Nanny with them ; the gipsy woman is present, also ; having been waiting for some time, with the constable, outside. It happened to be a "cleaning day," and Sybil, although never slatternly, was clothed in her oldest and coarsest dress. She looked beautiful, for all that ; and blushed immensely when her own Cavalier, and the company drew up. Lucky was it that the old nurse, whom she had not seen for years, was present ; else her confusion might have been more remarked. Sybil scarcely knew what she said in company, or how she looked ; feeling, however, intensely happy that the young man had come to her, although she had not been able to keep their appointment. The Bible says truly, that a young being will leave father and mother, and cleave, &c. Scarcely did she regard the anxious glances of the strange gentleman, nor the tearful looks of the strange lady, because her lover's presence filled all her soul ; but when the lady suddenly

clasped her in a fond embrace, she did turn and look with some degree of interest. The greatest truths in existence are generally communicated without words; and thus it was that our maiden felt instinctively that this kiss was the outpouring of a mother's love. Then she almost swooned (for was not the great wish in her life now being granted?) and for the moment almost forgot that her lover was present.

But Nicholas came in from the sheep-fold, and seeing all this company assembled in his own house, he stared as only a rustic can stare. Moreover, being a courageous, rather than a courteous man, he asked, very bluntly, what they were doing there.

"We are come," replied the Squire, "to fetch this young maiden away."

"Not if I know it," replied he. But just then his eye happened to alight upon the gipsy crone, when he fairly trembled with fear and rage.

"Who are these," said he, "that you have brought into my house?"

The gipsy answered, in rather a sarcastic tone:—"At last, you are honoured with a visit from the father and mother of Sybil."

Then our Cavalier took up the cue, saying:—"You doubt it, perhaps. Would you like the evidence adducing here, privately, or before my friend, Hugh Childers, of Carr-house?"

"I have no desire to appear before Squire Childers."

"I thought not."

Nicholas Yak, after being put into possession of much that the reader has already learnt began to excuse himself. He swore (and the gipsy did not contradict him) that he never knew who were the child's parents nor where she was born. The true father hinted that this was information which he did not wish to learn. One thing, however, was evident, Sybil might have fallen into worse hands, for, no doubt, she would eventually have succeeded to all the wealth which Nicholas Yak had accumulated.

And now our story—fragmentary, and very imperfect as it may appear—is ended.

'Closed!' exclaims the readers. 'Why, you have told us scarcely anything yet. Who was this Cavalier,

and what public or private business caused him to travel through this district of Yorkshire ? Having brought into family union a long lost, but marriageable daughter did he assume a high prerogative, and take her away again ?”

It would occupy too much time, were we to answer all these questions in detail. Imagine, reader, a long succession of the happiest events, and become assured that the *finale* was, in every respect, just such as you could have desired.

Trades Unions at Sheffield.

PART I.—THE EVIL.

The Metropolis of Steel ! We have done homage to her Genius of Trade* ; but have now to reveal—and probe, it may be—a foul cancer, which has eaten into the vitals. Men of Sheffield ! cut it out ; cauterize the wound, whatever amount of present suffering it may cost, for fear the whole body, social and commercial, should become a polluted mass. Now the world sneers. “Your town,” says one, “has secured for herself an undying place in history.”

Two or three days ago, I had some talk with an old disciple of Lavater respecting the characteristic type of Sheffield men. He stoutly maintained that for “knavery, brutality, and unblushing impudence” Sheffielders justly take precedence over every other town in England.” I quoted a few old proverbs :—“Give a dog a bad name, &c.” “It is easy to kick at a man that is down, &c., &c.” My opinion, honestly expressed, was, that a moiety of the people is bad, preeminently selfish and cruel ; also that, taken *en masse*, they had a somewhat rude exterior ; nevertheless there are generous impulses, and great mental capacity manifested at Sheffield. The main point at issue between us (a very important one, certainly) was, that he regarded the Crookes and Broadhead type as general ; while I contended that it is exceptional : the thousands are sound-hearted, the hundreds only are base.

“The advocates of trades unions,” said he, “want to persuade the public that only Broadhead, Crookes, and Co.—a very small, but select firm—are at all implicated in trade outrages, that the great body of union members, even in connection with the saw trades, connived not, and had no guilty knowledge of these things.”

“They speak falsely,” said I ; “at least so far as the Sheffield saw trades are concerned.”

* *Vide* the “Iron Sinews of Yorkshire.”

“Of course they do. The members generally must have known that the enormous sums demanded of them in contributions, amounting often to one-fifth of their earnings, could not be required for legitimate purposes. It is but a poor disguise to say that their guilty knowledge and connivance extended only to ‘rattening.’* In many cases (Linley’s and Ferneough’s, for instance) they knew that, owing to high walls, and the constant presence of watchmen, obnoxious individuals could not be rattened: still they voted that *something* must be done; so one was shot at, and another was blown up, together with his family, at midnight. The trades union officials appear to entertain strong notions of their prerogatives; and yet they went to work on philosophical principles, on a graduated scale. If a man will not pay his “natty money”† he must be rattened; and if the masters still give him work, in a secure place, then all the other men must be withdrawn from that particular wheel or factory; if the masters persist in employing *non-union* men, then their works must be blown up; but if such blowing up is only partially successful (for most factories are strong), then the non-union men must be maimed or shot, otherwise blown up at midnight, together with their families, when sleep had made them unconscious of danger. Supposing two or three *heavy jobs* were decided upon at the same time—such as the blowing up of a factory, and the shooting at some obnoxious man—which would necessarily entail extraordinary funds, the contributions were specially enhanced; so that many an union man had to pay 8s., 10s., and even 12s. out of his week’s earnings. Most of these payments were disguised in the societies’ books under some general heading, as, for instance, ‘expenses of investigating committee.’ It is true, the unions have their ‘head-centre’ and small committees of manage-

*As these papers are destined to be read for ever and ever, it may be necessary to define certain trade terms, so that after centuries have elapsed, when both the practices and phrases have become obsolete, future readers may not stumble over obscurities in our text.

RATTENING: Stealing of wheel-bands and tools, whereby the workman is deprived from following his labour.

† NATTY MONEY: Each member’s weekly contribution to the union funds.

ment ; but there is scarcely an intelligent man in Sheffield but felt convinced that these notorious outrages were plotted and perpetrated by trades union officials, while a great majority of the members themselves willingly shut their eyes, for fear that an intimate knowledge of the atrocities should involve them in personal danger. Look at the matter in a common-sense view. The inhabitants, when they went out in a morning, heard of this murderous attack, or that blowing up. How did they suppose these outrages had originated ? Not from personal enmity or private malice : trades unions were at the bottom of all ; a dreaded conspiracy, to which people shut their eyes in fear. Is it not marvellous that such dastardly crimes should be hatched in public-house meetings, and perpetrated in public thoroughfares, and yet the villains remain undiscovered ?

“ Marvellous indeed,” said I : “ moreover it is not difficult to perceive throughout this crime-stained town a strong desire to palliate the wickedness of such outrages. Deeds which men would shrink from and loath in their individual capacity are readily undertaken in combination, to establish trade-unionism, as if *that* end must be attained by whatever means, at any cost. It may be that none of those trade secretaries would have undertaken murder or arson from personal vengeance or private gain ; just as the soldier, who will fight the enemies of his country, would not in private life cut down every one who happened to differ with him in opinion. Can it be possible that Broadhead, or the philosophic Crookes, actually brought themselves to regard trade-unionism as the noblest influences of life ; of far higher consideration than any other law, human or divine ? Truly it should be a worthy object to warrant such remarkable devotion !”

Let us glance at the results.

No Yorkshire Commission was ever conducted with greater ability than that which has terminated this Sheffield Outrage Enquiry ; indeed, had it not been for the wonderful discernment and determination of the Chief Commissioner, very little evidence would ever have been elicited. What vacillation, what systematic reticence, what unblushing perjury had the commis-

sioners first to overcome. At length they did strike at the root of this organized rascality, and have now just issued their report. I had thought, along with many others, that this great collection of evidence would be supplemented with hints, and animadversions, such as local experience would give authority to offer. But, perhaps, such comments would be regarded as entrenching upon the Royal Commissioners province; the examiners' duty being simply to furnish evidence, and not to draw conclusions. The facts at least are significant. It appears there are about 60 trades unions in Sheffield, and that 13 of them are directly implicated in rattenings or greater outrages, the most serious of these latter being confined to the saw trades. It will not be necessary to enter into the historical detail of crimes, for these are familiar to every one who reads a newspaper; and the catalogue is not likely soon to be forgotten. Yes, these Sheffield outrages have become historical. And yet there is something cowardly and despicable, as well as brutal, in the deeds:—two ruffians way-laying an old man, and striking him murderously on the head with life preservers; villains throwing cans of gunpowder down the chimneys, or through the windows of quiet households at midnight; secretly dogging a man's footsteps through the streets for weeks, with intent to maim him; hamstringing a horse, &c.

As a specimen of the manner in which trade outrages were carried out, we need but refer to that which is generally known as the Acorn-street murder. The fender grinders at Green-lane Works had a dispute with their master, and, as the latter would not yield, the men turned out. To supply their places Mr. Hoole obtained hands from Rotherham; but when the unions found that Green-lane Works could still be carried on, every species of intimidation, insults, threats, and even blows were freely used (some of the victims being left for dead); so that policemen had frequently to escort both master and men. The non-unionists still stuck to their employment. Bribes were then offered; and this same Wm. Broadhead acted as negotiator. Five, seven, and even ten pounds per man were promised if they would turn out: they would not leave, however, under £20 each so, one night an infernal machine was lit and

thrown into a bed-room, where one of the obnoxious men, together with his wife and child, were supposed to be asleep. It appears, however, that a woman lodger had occupied that room for a few nights, and was startled by a crash through the window. She innocently took up the dreadful thing, and rushed with it down stairs; but all this time sparks issued from the fuse, with a hissing noise. On the landing she met the grinder's wife (for all had been alarmed by the crash), who seized the dangerous missile with intent to throw it in the street, but it exploded in her hands. What damage did it do? The women, besides being stunned, had their night dresses set on fire, the floor above was shattered, the house was set on fire, the man (Wastnidge) with his child jumped out of the bedroom window; the wife, after tearing off her burning dress, made her exit the same way; the lodger was found in a lower room almost stifled with smoke and fatally injured. All of them had to be removed to the Infirmary, where, after lingering in agonies for a few days, the female lodger died. An innocent man was suspected of the crime, and the case came on for trial at the March Assizes of 1862, when Mr. Justice Mellor expressed himself very strongly against the "fierce and grinding tyranny" which existed at Sheffield. He instanced as a proof of widespread intimidation and fear, that even the surgeon of the Infirmary (to whom the women had been conveyed) appeared so alarmed about giving evidence that he was nearly being committed for contempt of court before he would answer questions fairly.

By his own recent confession, the villain Renshaw, who did this deed, stood with the gathering crowd, and even helped to remove the injured woman. It appears he was to receive £6 for blowing up Wastnidge's house; also £5 extra if it was "a good job:" the extra money, he maintains, was never paid, although his employers admitted that the job was excellently well done. The perpetrator confessed that he had no ill-feeling towards his victims, and did not, until the house was pointed out to him, know where they lived, his only motive being to obtain the money. Said he, "they (the unions) all join together, and they get poor b—s like me to do it."

It is bad enough to strike a *man* stealthily and mur-

derously on the head, when he will not conform to trade regulations ; but to scatter destruction wholesale, amongst helpless and unoffending families is a method of retribution peculiar to trades unionism at Sheffield. The *actual perpetrators* of such outrages were, probably, not very numerous, and yet they must have been known, if not to the police, at least to a considerable number of union officials. In the Hereford-street outrage (where Fernehough and his family were blown up) it has been clearly shewn that at least six persons, including three trade secretaries, were directly implicated ; and yet a proffered reward of £1,100 failed to elicit any information.

Woe ! woe ! woe ! to the individual who will not conform to trades union regulations. A man named Linley sets the Saw Grinders' Union at defiance ; he employs as many apprentices as will work for him, he pays no "natty money," and, consequently, is in a position to do his grinding on free trade principles. Well, working contrary to union rules, he must be "made so as he can work no more." Two men are engaged to do the job ; and, at length, through the back window of a public-house, he is shot with an air gun. The victim lingers for several weeks, but ultimately dies of his wound. This job also "was excellently well done ;" and Linley's murderers receive the *maximum* outrage fee, namely, £15, or £7 10s. each man.

The Commissioners have obtained direct evidence respecting four cases of shooting, with intent to do grievous bodily harm, three other aggravated assaults, seven attempts, more or less successful, to blow up manufactories and quiet households ; besides, above a dozen minor outrages, and several hundred cases of rattening. Is it the genius of trades unionism to develop great ruffians ; or, are the Sheffield trade secretaries simply gifted with a faculty to discover and utilize that vicious and violent element which pervades, more or less, all our large towns ?

PART II. QUERY—ARE TRADES UNIONS NECESSARY OR BENEFICIAL ?

My opinion is that trades unions are a bane to the working classes, and the pests of trade. For years, on all suitable occasions, I have not scrupled to say so, plainly, through the press. Reader, what is it that *you* would teach, by that significant curl of the lip ? “In spite of such denunciations, trades unions have not only maintained their ground, but greatly progressed.” Yes, that is true. And they have done some very effective work, particularly at Sheffield. There is a conviction widely and strongly expressed by careful thinkers, that these organizations can only be kept intact by coercion and fraud.

Before attempting to consider, in detail, how trades unions affect the prosperity of trade in general, and the personal interests of individual members, we must look upon the question in a patriotic point of view. It may appear startling, but it is nevertheless true, that trades unions are, to a great extent, organised sedition. When a certain popular agitator (inspired by no Divine unction) counselled trades unions to bring the influence of their overpowering numbers to bear upon all questions, social and political, he knew the *genius* that would be invoked. We have seen some fruit already ; and, if no salutary checks are imposed, the time may come when sober-minded men will stand aghast at the result of this teaching. Year by year, great armies of workmen are falling into rank and file, each under his particular trade banner ; and who shall say that they will not, some day, unitedly take the field, and fight for the supremacy of a class interest ? The reader, it may be, will make answer—“Well, and suppose they fight fairly, who shall hinder them ? Mob law will never succeed against wealth, and established precedents, in a well governed country ; therefore, indulge no gloomy forebodings of the future. Perhaps nothing in England can create a great national panic but a great scarcity of food ; for there is elasticity in our national resources, and persevering energy in our national mind. The influences

for good are far greater than the germinations of evil ; and, where the causes are inevitable, Englishmen will patiently endure a great deal of pinching. There is true heroism in the national heart, and where the heart is sound no evils can be permanent." Friend, I like your doctrine, to a certain extent it is according to experience, because, when unfettered, the heart of the nation speaks out thus. But do you not invariably notice that in mass demonstrations the evil elements are uppermost ; violent and selfish men gain a fatal predominance, simply from the power of impudence itself. Then what follows ? You know the old proverb—It is easier to raise the devil than to lay him. If trade shall fail, the time may come when working men will clamber into our Parliament House, on the shoulders of their representatives, and demand (legitimately, as some think, since it has been done in France) that the national treasury must supply them with wages and food.

We should be sorry to charge trades unionism in general with the guilt of these Sheffield outrages ; no doubt the practical operation of each society will vary according to the individual character of the members themselves. But, since these trade outrages have been dragged to light, it is not surprising that the country and the legislature should keep their eye upon the Amalgamated Association of Trades Unions. To their honour be it spoken, the workmen of a few towns have defended themselves from any complicity in, or sympathy with such dastardly crimes. In London the unions have gone further—they demand that the saw-grinders shall expel from their society the confessed plotters and perpetrators of these outrages. The saw-grinders are too consistent to do anything of the kind. Sheer good fellowship and unity of action have been so exemplary, that it would be manifestly unjust to make Broadhead and Crookes the victims of an invidious distinction. At a full meeting held a few days ago in the Temperance Hall, the members resolved that they would "decline going into any *justification of those things* (rattenings, shootings, blowings up, &c.) *being done*, beyond asserting that they are but the *effects of a cause*—the want of some properly regulated legislative

measures binding men in some degree to what is honourable, just and good." The resolution continues—"We, therefore, considering well our present position, *decline to disgrace ourselves as cowards* by deserting the men who have taken upon themselves the task of *risking their lives and their liberties* for what they believed to be the good of the institution." Surely, after this, we shall not require examples of a bond of brotherhood.

The resolutions just alluded to assume that Trades' Unions are a necessity of the age; and that men "honourable, just, and good" will conform to trade regulations. Seeing, however, that there are occasional delinquencies, the Unions require *legal* power to enforce obedience. Still, in the absence of Parliamentary powers, any, even the most violent means, are not altogether to be discountenanced. Secretly shooting a man, or blowing up a whole family at midnight, are simply "effects of a cause," and must necessarily follow unless legislative measures compel men to what is "honourable, just, and good." Thus we have brought to light a new code of morals, specially incorporated for the protection of Trades' Unions.

And now let us look carefully at the benefits which these societies are calculated, or assumed, to bestow. Their chief object confessedly is, to obtain from masters the highest possible wage for the smallest amount of work. But like everything else, the price of labour depends upon supply and demand. To restrict the supply, therefore, it is enacted that no workman shall take more than one apprentice in a given term of years, and sometimes not even that: moreover, that no man shall engage himself to any master, except through the medium of his trade union, which society shall stipulate at what price and on what conditions he may work. Thus we see that the individual member has little scope for the exercise of private judgment; but, as in those secret societies which we read of on the Continent, the renegade or disobedient soon becomes a marked man. Now this policy might be unobjectionable supposing there was a fixed and uniform supply of work—just so much, and no more, all the year round. But trade is fluctuating. There may be some masters, who, from the nature

of their contracts are willing to give more wages than others ; and it is very certain that all masters are able to give better wages at one time than another, according to the ever varying phases of the markets. One master may only have a precarious supply of work ; another sufficient to supply his hands constantly with over-time. Moreover, the shop-room, machinery, and motive power vary considerably in different establishments ; all of which counterbalancing circumstances would be taken into account were the workman permitted to conclude his own negotiations. Strange that the working men will not see how there must be free trade in labour, as in everything else !—freedom of action both in regard to masters and men. When the employer says : “ I can afford to give you so much wage for so much work, and no more,” the artizan can either accept the terms or carry his labour into another market. All this is perfectly just and equitable, for each man is a free agent, and can exercise his own volition. But, supposing the master was to say—“ You shall come to work on my terms, whether you like them or not. Dare to stay away, and my overseer shall whip you up with the ‘ cat.’ Should it be necessary to repeat this discipline for two mornings in succession, or three times a week, the delinquent shall have one ear cut off ; but if he still remains incorrigible—resisting authority—and there be neither ear or nose left for amputation, then he shall be shot.”

Working men ! do not mistake the writer’s intentions, and infer that he is a “ special pleader ” for the supremacy of capital over labour. God forbid that I should ever attempt to sneer at, or curtail the privileges of our industrious artisans ; who are, indeed, the source from which all true national wealth springs ! Do we not see a great succession of our best men—the world’s leaders—rising from the ranks of those born to labour ? But I am not afraid to speak the thought that is in my mind to any class, without fear or favour ; and to the great body of artisans I say, humbly but earnestly ;—“ Have no fellowship with the unfruitful works of darkness.”

But we are diverging somewhat from the main line of argument. Consider it as proved that trades unions

do advance and maintain the price of labour ; we have still to bear in mind that this result affects only the small number who will work, and can obtain employment. As the Sawgrinders' Union is, at present, brought most prominently before the public, we will take its operations to illustrate our views. It appears that this society is restricted to 200 men, of whom a majority chooses to labour, and the remainder will do no work if they can help it, preferring to subsist upon the "box scale," rather than distress themselves with any such unpleasant and injurious occupation. Of course these men of leisure are not averse to a little congenial recreation. Moreover, gratitude impels them to undertake any desirable job of rattening, blowing-up, or shooting, which the interests of such a benevolent institution may require. But is the generosity real, or only assumed ? Alas ! for human nature ; we are afraid that even in such a case the generosity is not genuine. In addition to the "scale," there are special rewards, averaging from 5s. to £15, according to the nature of such secret service : it is that material reward which tempts them. Men who do not average a week's work per year, are kept in idleness by the funds of the society, the argument deduced being, that there is a higher rate of wages for those who are employed. [The fact is altogether ignored that those men's idleness is a tax upon national saws, seeing that the buyer must pay more for such articles than he otherwise would do if the labour market was free.] It has been proved in evidence that these *working* sawgrinders have contributed upwards of £40 per week to the funds of their small union ; and that one individual had received no less than £200 "scale" for leading an idle, worthless life.

One feels surprise that intelligent working men do not perceive that such monopolies are bad ; injurious to trade, and, in the end, a positive disadvantage to themselves. Supposing that Sheffield could secure a monopoly in the manufacture of knives, saws, &c., it would matter little what minor restrictions were imposed ; but when Belgium, France, America, and other countries, where labour is free, are disputing with us for supremacy, the policy of high prices, and restricted

production becomes ruinous. It seems preposterous that, with the population and general requirements constantly increasing, any particular trades union should decree that only a very limited number of men are eligible to work. The results of this narrow-minded policy will not be confined to the particular trade in question, since there are various other branches mutually dependent. We are credibly informed that, scores of times, masters refuse to accept orders, which under favourable circumstances would be amply remunerative, entirely because of the uncertainty attending the labour market. The consequence is that, although this country, and Sheffield in particular, possesses great natural advantages, foreigners are gradually getting our trade; not unfrequently supplying even our home market. Trades unions are ruining trade. But are the great bulk of members immediately and essentially benefited by their own policy; for some men, we know, would kill the goose to get the golden egg? The sums which individual workmen have to pay for making labour scarce, are becoming a serious tax, amounting in the saw trade to about twenty per cent. of the gross earnings. Secondly, in most cases, the secretary, like Broadhead, keeps a public-house, where union meetings are regularly held. In all cases punctuality of attendance is strictly enjoined; for, soon as ever a member begins to absent himself from the meeting, at once does he become a suspected man. As might be anticipated, there are often very interesting topics for careful consideration. If the orators become earnest and excited, a reaction necessarily follows, and the nervous energies have to be recruited with gin; when the speakers are prolix or profound, a great deal of beer is drunk, particularly by the listeners. All this time, while the secretary's coffers are filling, the workmen's earnings very sensibly diminish. Thirdly (an alternative): if they do not suffer in purse they must suffer in person. Most of these trade-outrages were perpetrated upon working men. Had the struggle been directed against capitalists, as a class, the proceedings although equally unlawful, would have been better understood. "You must think as we think, and work with us," says the despotism at Sheffield, "or be made so that you can work no more."

The better portion of working men are rubbing their eyes, awakened out of a horrible dream. They were previously getting tired of being mulcted of their earnings to support idle vagabonds and designing knaves, and it was nothing but intimidation and force which prevented them from renouncing allegiance to trades unions.

The Sawgrinders' Union says truly that their outrages are the "effects of a cause," and that something must be done to legalize union operations, making men "honourable, just and good." Government *will do something*, assuredly; but supposing it be by limiting rather than extending the power of trades unions; then the Broadhead type of trade secretary may become extinct. In the meantime provisional measures must be adopted to prevent a recurrence of these outrages.

PART III.—CAN LEGISLATURE PUT THE LABOUR QUESTION RIGHT?

We have had plenty of evidence respecting trade outrages, particularly at Sheffield; the country has been horrified and indignant at the recital of such deeds; the press, and even great bodies of trades union members have denounced special agents in scornful terms, and now comes the great practical question—Is it possible to remedy this state of things; and, if so, how?

It is scarcely likely that an Act of Parliament will be passed next session making all combinations of workmen for trade purposes illegal. "No, indeed," says the reader, "that would be interfering with the liberty of the subject." And is not the operation of trades unions an interference with the right of individual action? Do they not dictate to masters who they shall employ, and to workmen how and on what terms they shall labour?

"Let me speak," replies one grimy artisan, with a sinewy form and an earnest face; "then, after I have spoken, say on."

Yes, tell us all that is on your mind.

“Well, things are not just what they ought to be amongst workmen themselves. I go into a factory or workshop, and see one man with his coat on, walking listlessly about ; he does not leave the works, but his chief occupation consists in eating and drinking and looking on. Around are three or four ragged men, whose appearance bespeaks more of brute strength than intelligence ; there are, also, five or six boys straining and sweating and attempting to work above their strength, thereby entailing crooked limbs and premature disease. Those hard-working men receive from 16s. to 18s. per week ; the over-wrought boys, 7s., or, at most, 9s. per week ; the looker-on gets £5 or £6, and not unfrequently £7 a week, because he contracts with the masters, and gets slaves to earn his independency. Is this right ? No. In such cases as these the “liberty of the subject” wants interfering with. Now, such a state of things cannot exist where trades unions have full jurisdiction. The union says, no man shall be deemed fit to perform any handicraft unless he has qualified himself by a regular apprenticeship. Moreover, no individual shall ruin his trade or oppress other workmen for his own selfish aggrandisement ; therefore every man shall work on equal terms, taking only one apprentice, who will thus be enabled to step into his tutor’s place when age or disease may incapacitate the latter from labour. This is righteousness and truth.”

To all this we have only one answer :—The labour of children ought to be protected—a jealous eye should be kept over all factories where children are employed ; but if adults are silly enough “to work their blood to water” for another man’s benefit, no one has any right to interfere with the mutual arrangement. This man may be a fool and the other a knave ; but wisdom, equity, and prudence will never be disseminated by acts of Parliament or trades union resolutions. One thing is significant, that whenever any man has a little sense he gets a little money as the fruits of his own exertions ; then he learns prudence by experience, and wants no trades unions to help him. But where he does not desire their help, can he protect himself from their interference ? That is the real question which our legislature may have to consider. We will assume that work-

men have a perfect right to combine, and that trades unions are equally lawful with benefit or sick societies ; but as, for various reasons, there will always be non-conformists, how is the latter's freedom to be protected? " This is all mock sympathy," says the unionist. " In trade societies, as in everything else, the minority must give place, since it is only where trades unions are numerically strong that they are enabled to dictate terms. It is necessary that the workmen should be thoroughly united, since capital is well able to protect itself." But the strife is ruinous to all. At the late West Riding Assizes, an action for libel was brought (ostensibly by a workman, but really by his trade society) against a Sheffield manufacturer. It appears that the file-grinders' union commanded Messrs. Turton to dismiss one of their workmen who was not conforming to union rules. The firm refused to interfere, whereupon not only filegrinders but union men in other branches left in a body, thereby causing much inconvenience and loss. At Sheffield the masters also have their union ; and they resolved not to engage any of those men who had thus left Messrs. Turton's employment. The names of these " turnouts " were inserted in the master's " black list," so that when any applied for work at other places it was invariably refused them, because, as was notified, their place was still open at Messrs. Turton's, and where they might go back. Thus the hands were in a fix ; no new firm would employ them, while, to resume work at Messrs. Turton's would be virtually abandoning the union ; so they decided to try the legality of this " black list," and one of the masters who thus refused employment, and gave a reason for so doing, was made defendant in an action. The Judge, in recommending a compromise, said some wise things about this unholy strife between employers and employed, but when a verdict from the court was demanded, the decision could take no unprejudiced mind by surprise. The Judge ruled for the defendant, on the ground that " what is sauce for the goose is sauce for the gander," and that even masters have a perfect right to combine in their own defence.

I have heard men, who call themselves *voluntarists*, contend that all trade abuses will best cure themselves,

without the aid of legislative or judicial interference. The struggle must be carried through, say they, by the contending interests, and "the weakest must go to the wall." It is certainly not the tenor of this age to demand stringent laws for the abolition of combinations ; it may not be the province of our Legislature to determine the rate of wages, or bind masters and men by a stipulated mode of working ; but surely it is the duty of the public and the Legislature to prevent these trade struggles being carried on by outrage and fraud. And here we have a few words for the employers of labour at Sheffield. There is no doubt but that a considerable number of masters have connived at illegal practices, partly out of fear, but more commonly for the sake of peace. Where members are in arrears with their "natty money," or otherwise not conforming to society's rules, these facts are often brought very tangibly to the employer's notice ; a smithy bellows is cut, a wheel-band, or important tool is carried away in the night, and, as a consequence, labour has to be temporarily suspended. Perhaps the master felt convinced that, until such trade dispute was settled, it was useless to repair or renew the articles, for besides the extra cost, there was no security against a repetition of these outrages ; so the almighty trade secretary had to be conciliated. If the party rattened came to the club and paid up his arrears, with a further sum for "Mary Ann,"* he invariably was informed where his bands or tools might be found. In such a case proceedings went no further, and the man was graciously permitted to work for his living. It not unfrequently happened, however, that the workman was unable or unwilling to pay up the stipulated trades union impost, when the master would advance it for him, and stop the amount by weekly instalments from the man's wages. This was altogether wrong. The duty of manufacturers, instead of thus redeeming their own property, was to have delivered those rattening agents to the police as conspirators and felons : that would be an effective method of stopping many future trade outrages.

* Expenses incurred in taking away the bands, &c. ; a proportion of which (in ordinary cases 5s.) was invariably advanced from the box funds to such rattener directly the job was done.

Intimidation exists very largely in many forms, and trades union executives now appear to be drawing nice distinctions as to how far they can apply deterring or retributive influences without making themselves personally amenable to statute laws. Every week advertisements appear in the newspapers counselling workmen in certain trades to "keep away" from certain towns. Not unfrequently, we learn that where a dispute has arisen, and the old hands have been withdrawn from certain establishments, that the unions adopt a system of *picqueting*, by which all new operatives are intercepted, often insulted, sometimes threatened, and usually deterred from following their employment. Now, a great deal of such like intimidation may be carried on without the victims being able or willing to swear before a magistrate that they are afraid of receiving "serious bodily harm," short of which, it is commonly considered, that no one has any *legal* ground of complaint. It is always best to watch narrowly the buddings of evil, and crush it then; this system of espionage and intimidation is the distinguishing general feature of trades unionism; and it is not unlikely that, next Sessions of Parliament, we shall have a little clearer elucidation of the law in relation to such matters. For sometime yet, perhaps, "offences will come;" but it is for our Legislature to give power to the anathema:—"Woe unto those by whom the offence cometh!"

And yet, on second thoughts, would it not be wiser, and far more glorious, to effect a reformation apart from special legislative enactments? On looking through some of my old contributions, printed twenty years ago, when "liberty, equality, and fraternity" was the watchword, I find in the *People's Journal* such sentences as these:—"An effect never arises without its cause; if a people will have wise government they themselves must be wise. To elevate a nation you must begin with the individual; for, unless intelligence, sound moral and religious principles circulate in the veins of society, legislative or municipal enactments will never make a wise, a contented, and prosperous people." And again:—"Personal improvement is the foundation of all national greatness." In trades unions particularly, there is great scope for the exercise of sordid, cruel,

and malignant passions, so that each institution is sure to become leavened by the individual character of its leaders. No society can receive any credit by the introduction of Sheffield saw-grinders. If the associated unions have any good and honest intentions let them purge themselves of all such miscreants as Broadhead, Crookes, and Renshaw ; for men of that character never repent, and their very presence is a contamination.

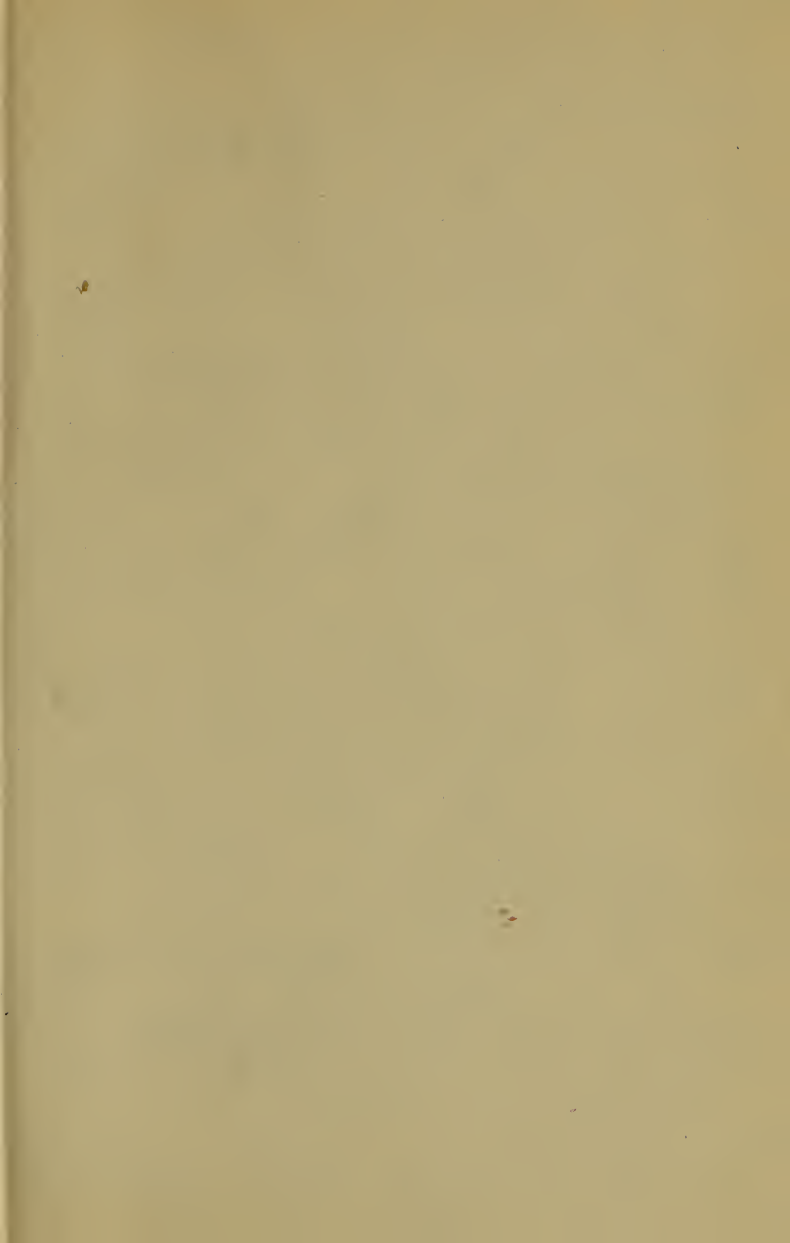
In protecting individual liberty no wise man would desire to see class organizations put down by force. That kind of legislation does not accord well with "English proclivities." There is a great depth of sound generous impulses in the heart of our British artisans ; more than can be found in any other people under the sun. They have not received that kind of gentlemanly education which gives them the art of gilding or concealing the most heartless and selfish designs. No ; their greatest faults all appear on the surface, in the public eye ; and I sometimes think that their adhesion to trades unions springs more from an impulse of honour and mastery than any intelligent conviction of right. With a little *better* education, working men would have more individuality of thought, and become less influenced by designing demagogues, who only use them as a ladder for their own selfish aggrandisement. Let us hope that the time is not far distant when the people generally will see that class organizations and trades unions in particular, work mischief continually. No doubt the root of the evil lies in the want of true sympathy between man and man in their several relations of life. There ought to be a stronger bond of feeling and interest between employers and employed, instead of that fatal jealousy which tempts each to extort as much as he can from the other. There wants more general recreation, a closer mingling of rich and poor, as in "the good old time ;" more generous feastings, and more sports. Mass meetings of this kind would soon render trades unions abortive, and demagogues would find their occupation gone. Moreover, if instead of Limited Liability Companies in trade being embarked by speculators with no equitable intentions, working men were encouraged to save part of their earnings, and invest them in establishments which their

own exertions alone would render productive, the tone of English trade would be far more healthy and prosperous.

Meantime, cannot some general, feasible plan be adopted to prevent the endless recurrence of strikes and lock-outs. In one sense these results may be regarded as national calamities, because they restrict our trade ; still the immediate consequences are local, affecting the retail dealers and rate-payers in those districts where the disputes arise. In a town like Sheffield, would it not be well to have a standing Board of Arbitrators, elected annually, or for a term of years, by a majority of the burgesses ? Every trade dispute of any magnitude (particularly where it had resulted, or was likely to result in a strike or lock-out) should be referred implicitly to this board ; and, although the arbitrators would be invested with no compulsory powers, still the justice and equity of their award might possess a moral power which would remain unchallenged. In nine cases out of ten trade disputes originate in bad feeling, and are aggravated by personal affronts, making it afterwards almost impossible for the contending parties themselves to discuss the real merits of their case in an impartial spirit. At such times the adjudications of an independent Board of Arbitrators would be everything that could be desired.

DONCASTER :

Hartley and Son, Printers by Steam Power, High-street.





LIBRARY OF CONGRESS



0 022 120 662 9